

EXHIBIT “R”

1 THE COURT: Is that correct, Mr. Coffey?

2 MR. COFFEY: Yes.

3 THE COURT: Okay. Members of the jury, that
4 fact has been so stipulated by the parties in this case.
5 The People may call their next witness now.

6 MS. EGAN: Thank you, Your Honor. The People
7 call Dr. John Waldman.

8 JOHN WALDMAN, after first having been duly sworn by the Clerk
9 of the Court, was examined and testified as follows:

10 THE CLERK: The sworn witness is John B.
11 Waldman, W-A-L-D-M-A-N.

12 THE COURT: You may proceed, Ms. Egan.

13 MS. EGAN: Thank you, Your Honor.

14 **DIRECT EXAMINATION**

15 **BY MS. EGAN:**

16 Q. Good afternoon, Dr. Waldman.

17 A. Good afternoon.

18 Q. Would you introduce yourself to the jurors?

19 A. I'm Dr. John B. Waldman, retired pediatric
20 neurosurgeon.

21 Q. When did you retire?

22 A. Two years ago, almost two years ago.

23 Q. Congratulations.

24 A. Thank you.

25 Q. How long did you practice pediatric neurosurgery?

1 A. Over 30 years. I began at Albany Med and stayed
2 there my whole career. I began in 1979.

3 Q. So, you were practicing at Albany Med at the time of
4 your retirement?

5 A. Yes.

6 Q. And what was your position at Albany Medical Center?

7 A. I was -- well, I was a professor of surgery, Division
8 of Neurosurgery, and I was an attending neurosurgeon on the
9 full-time faculty.

10 Q. And what were your duties as a professor?

11 A. As a professor, teaching, taught medical students,
12 both in the ward and in the classroom; and Albany Med also has
13 a neurosurgical training program, so it involved teaching
14 residents, as well, and full-time practice.

15 Q. And what were your duties as a treating physician?

16 A. Well, for most of the time, I took care of
17 predominately young children and took care of children with
18 neurological problems that were possibly in need of surgery.
19 It isn't always surgery, but medical management of patients, as
20 well.

21 Q. Now, could you tell the jury about your formal
22 education?

23 A. I graduated from Yale University. I just returned
24 for my 45th reunion. And then I went to Albany Medical College
25 and got an M.D. degree in 1973. After that, I entered the

1 residency training in neurosurgery. That required, at the
2 time, five years of neurosurgery, one year of general surgery.
3 And after that, I spent some time in a pediatric nursery
4 fellowship or fellowships. I did some time at the Children's
5 Hospital Medical Center in Boston and some time at The Hospital
6 For Sick Children in Toronto; and after, that I returned and
7 was on the full-time faculty at Albany Med.

8 Q. And were you board certified?

9 A. Well, board certification requires completing an
10 approved residency, which I did, passing a written examination,
11 which I did during my residency, and then you have to wait a
12 period of time and submit practice data that gets reviewed.
13 You then have to be accepted for sitting for an oral
14 examination, and I did that. I finished my residency in 1979.
15 I think the first opportunity I had to sit for the Boards was
16 either in 1981 or '82. I don't remember, but I passed my
17 Boards at that time. At that point in time, there was no Board
18 certification in pediatric neurosurgery, but subsequently, much
19 later - I think in the early 90's maybe - there was -- American
20 Board of Pediatric Neurosurgery was formed, and I also passed
21 that entrance, also. So, I'm Board certified in neurosurgery
22 and pediatric neurosurgery.

23 Q. Did you have to recertify periodically for those
24 Boards?

25 A. General neurosurgery, no. At the time, they were for

1 life. Currently, you have to recertify. Pediatric
2 neurosurgery, you have to recertify, and I did just before I
3 retired. I think I had to take a written Board examination,
4 which I passed. So, I was recertified approximately two years
5 ago.

6 Q. And did you maintain that certification throughout
7 your years of practice?

8 A. Yes.

9 Q. In what states were you licensed to practice medicine
10 in?

11 A. New York State.

12 Q. And have you written any books or professional
13 journal articles?

14 A. Yes.

15 Q. Can you estimate how many?

16 A. No. I don't know.

17 Q. Is it more than ten?

18 A. More than ten, fewer than 50, I would guess.

19 Q. What types of articles have you written?

20 A. All types. Early on, some of it had to do with
21 science research; then later, mostly case reports. I was
22 involved in writing a chapter for a book for general
23 practitioners on neurosurgical issues. My chapter was, of
24 course, on pediatric neurosurgical issues that a pediatrician
25 or family practice doctor might see. I guess that's most of

1 it.

2 Q. Now, let's talk about September of 2008. Were you
3 employed at Albany Medical Center at that time?

4 A. Yes.

5 Q. And did you come to know someone by the name of
6 [REDACTED] [REDACTED]?

7 A. Yes.

8 Q. How did you know [REDACTED]?

9 A. Well, I don't have any direct recollection, but from
10 review of the medical records, he was admitted to the hospital
11 and a neurosurgical consultation was requested. I probably was
12 not on call that night, so one of my partners saw [REDACTED]. And
13 then I believe the next day, I saw him; and the day following,
14 I saw him in the hospital.

15 Q. Do you recall the date you first began your
16 neurosurgery consult with [REDACTED]?

17 A. That I personally did?

18 Q. Yes.

19 A. I believe it was either -- probably the 22nd of
20 September, and then I saw him on the 23rd.

21 Q. Now, what is a consultation?

22 A. Well, typically, when someone is admitted to the
23 hospital, there's a primary physician of one specialty or
24 another who has the primary responsibility for management of a
25 patient. A patient like [REDACTED], who is admitted to the

1 Pediatric Intensive Care Unit -- I apologize. I thought I
2 turned my phone off.

3 THE COURT: That's okay.

4 A. The question, again, was?

5 Q. What is a consultation?

6 A. So, in this case, it would have been a Pediatric
7 Intensive Care Unit doctor. That's a pediatrician who has done
8 a fellowship in intensive care medicine, pediatric medicine.
9 And that person is primarily in charge of the overall care of
10 the patient; but as I'm sure everybody knows, medicine is very
11 specialized these days. So, if a patient has a problem with
12 their eye, you would consult a pediatric ophthalmologist. If
13 they have a problem with their brain, they would consult with a
14 pediatric neurosurgeon or a pediatric neurologist and likewise.
15 So, a consult is a -- someone who is asked to see a patient for
16 a specific purpose related to their area.

17 Q. Why were you asked to get involved in [REDACTED]'s
18 treatment?

19 A. Because [REDACTED] had acute or subdural hematoma.

20 Q. Now, did you review any of [REDACTED]'s records as part
21 of your consult?

22 A. Yes.

23 Q. Do you recall what records you reviewed?

24 A. Whatever was available in the medical record. Now,
25 to what degree I reviewed it, I don't have any direct

1 recollection, but I would have -- my practice was to see the
2 patient with one of the residents, possibly the resident who
3 had initially seen him in consultation. So, it would be a
4 combination of getting information directly from other doctors
5 who are caring for him, including my own resident, and the
6 chart; but I have no direct recollection in this case of what I
7 actually reviewed.

8 Q. Did you review any tests or scans of [REDACTED]?

9 A. Yes, I did.

10 Q. What did you review?

11 A. I reviewed his CT scan.

12 Q. And what is a CT scan?

13 A. A CT scan is a specialized x-ray. X-rays look at
14 different densities of tissue. Regular x-ray can only
15 discriminate between very wide densities. For example, if you
16 take a chest x-ray, you can see bone and you can see air and
17 you can see vague gray soft tissues, but a CT allows one to see
18 very small differences. So, you can see much more detail. And
19 it is -- but still, you are looking at densities; and the
20 format is such that you view a three-dimensional structure in
21 two dimensions. It's like slicing a tomato and taking the top
22 slice off and looking at that slice, and then taking the next
23 slice off and looking at that slice. So, you get a slice from
24 the bottom to top or top to bottom or whatever part of the body
25 you are scanning.

1 Q. Does a CAT scan typically only look at one slice?

2 A. No, no. There's always -- always covers multiple
3 slices, and the thickness of the slice also varies, and there
4 are other techniques, like injecting contrast agent, which you
5 can do to make certain tissues look different and help you
6 distinguish between one thing and another.

7 Q. How do the differences in density appear visually on
8 the CAT scan?

9 A. Well, the CAT scan is, in essence, a bunch of zeros
10 and ones. It's digital information that then needs to be put
11 into a picture format, and that is done on a gray scale,
12 meaning from bright-bright white to black-black-black and
13 everything in between, and those -- the image can be
14 manipulated. There is no -- for example, in the old days when
15 you took an x-ray, it came out on a piece of film. That was
16 the original. There is no original CAT scan that anyone can
17 look at. It's just numbers that get manipulated. Does that
18 make sense?

19 Q. Yes, it does. Thank you. Do you actually perform
20 the CAT scans yourself?

21 A. No. The CAT scans are done by specially trained
22 x-ray technicians.

23 Q. Are those technicians doctors?

24 A. No, but they are supervised by doctors.

25 Q. And then once the scan is complete, what is done with

1 that data? Who looks at it next?

2 A. Well, it depends on what is being imaged. But if
3 it's the brain, most institutions today, although not all,
4 would have a neuroradiologist - certainly, the Albany Medical
5 Center Hospital has Board certified neuroradiologists - who are
6 specially trained not just in radiology but in looking at
7 images of the nervous system; would review those films, dictate
8 a report, and that report would be printed out. It would be
9 corrected by the neuroradiologist and then would become part of
10 the medical record.

11 Q. Are you a neuroradiologist?

12 A. No.

13 Q. Can only radiologists read scans?

14 A. Anybody can read a scan, but in terms of
15 competence -- well, part of neurosurgical training is -- a
16 large part of neurosurgical training is involved in reading
17 scans; CAT scans, MRI's. Neurosurgeons make decisions on how
18 to treat patients, particularly surgical treatments, based on
19 imaging in large part. So, we can't rely on someone else,
20 someone else's interpretation of a film, if we are going to be
21 the responsible surgeon to operate on someone's brain. So, we
22 have to be -- we have to know how to read scans.

23 Now, are there times when we consult with
24 neuroradiologists about a difficult case, for example?

25 Absolutely. We work together. But many times for

1 straightforward problems, although films are officially read,
2 we always look at them ourselves and make our own
3 determinations.

4 Q. So, approximately how many scans have you read in
5 your career?

6 A. Probably hundreds of thousands. My career in
7 neurosurgery --

8 MR. COFFEY: Objection. He wasn't asked about
9 his career. He was asked how many he read.

10 THE COURT: Ask another question, Ms. Egan.

11 MS. EGAN: Sure, Judge.

12 Q. Now, did you review [REDACTED]'s CAT scan yourself?

13 A. Yes.

14 Q. And how is the information from a CAT scan stored?

15 A. Um, well, I'm sure it's on-line for a time and then
16 it probably gets archived. What that means at Albany Med, I
17 don't know, but I would venture to guess that it's stored on
18 tape.

19 Q. Has neuroradiology always been its own specialty,
20 Doctor?

21 A. No. When I began practice, there was no specialty of
22 neuroradiology. All of the studies that were done were done by
23 neurosurgery pretty much. So, back before there was CT and
24 MRI, the available modalities were mostly x-ray and
25 angiography, where dye is injected into blood vessels and the

1 rapid sequence of x-rays were taken to outline the blood
2 vessels and a technique called pneumoencephalography. So, when
3 I started my neurosurgical training, that's what the junior
4 neurosurgical residents did. We did studies on thousands of
5 angiograms and pneumoencephalographs. And then when CT's
6 started, eventually, neuroradiology became a separate
7 specialty.

8 Q. And prior to neuroradiology becoming a separate
9 specialty, all neurosurgeons had to read their own scans?

10 A. Yes. I don't recall, but it's possible that they
11 were not even reviewed by radiology at all at that point. I
12 don't recall.

13 Q. Thank you. Now, if I were to show you images of
14 [REDACTED]'s CAT scan here today, could you explain to the jury
15 what you saw on that scan?

16 A. Yes.

17 MS. EGAN: Then at this time, Judge, I would
18 move People's Exhibit Number 14 into evidence, which is, I
19 understand, going to be on stipulation.

20 MR. COFFEY: Well, I want to get a foundation
21 for this, if I can, meaning -- can I ask him questions
22 first? It's part of the record.

23 THE COURT: Yes. If you are objecting on
24 foundation, Ms. Egan can attempt to lay the foundation or
25 if you want, Mr. Coffey, to do it -- I'm not sure. Is

1 there an objection?

2 MR. COFFEY: I don't know because --

3 MS. EGAN: I'm sorry. I'm confused. I thought
4 we had agreed that that would be stipulated in as the
5 other medical records were.

6 MR. COFFEY: That's fine.

7 MS. EGAN: I can get a certification for it if
8 needed.

9 MR. COFFEY: I don't object to it.

10 THE COURT: People's Exhibit 14 will be received
11 in evidence at this time on stipulation of the parties.
12 Ms. Egan, would you please, for the record, identify what
13 People's 14 is?

14 MS. EGAN: Certainly. People's 14 is a compact
15 disk which contains the images derived from the CAT scan
16 of [REDACTED] [REDACTED] which was conducted on September 21st of
17 2008.

18 THE COURT: Okay. We will have it marked in on
19 stipulation of the parties.

20 (People's Exhibit 14 marked for identification received in
21 evidence and marked People's Exhibit 14 in evidence.)

22 MS. EGAN: If I could just have one moment, Your
23 Honor, to set up the audiovisual display.

24 THE COURT: Sure.

25 (Brief pause in proceedings.)

1 MS. EGAN: I apologize for the delay, Your
2 Honor. I'm having a little better time with it this time
3 but technology is not my friend.

4 THE COURT: Okay.

5 MS. EGAN: Your Honor, may I ask the witness to
6 step down off the stand?

7 THE COURT: That's fine. Doctor, if I could
8 just ask that you keep your voice up nice and loud. Thank
9 you.

10 THE WITNESS: Yes, sir.

11 MS. EGAN: And I will ask that you stand off to
12 the side.

13 THE WITNESS: Maybe I will stand on that side.

14 Q. Is this the scan that you previously reviewed in
15 connection with [REDACTED] [REDACTED]' case?

16 A. Right. This is from Albany --

17 MR. COFFEY: Can I identify which picture he's
18 identifying, so we can specifically know exactly what --

19 THE WITNESS: Yes.

20 MS. EGAN: Certainly, Mr. Coffey.

21 Q. I'm beginning with image number one of the scan.

22 A. Here it says image one of 28.

23 THE COURT: Hold on one second. Can the jury
24 hear the Doctor?

25 A. One of 28. So, there are 28 slices. This is the

1 first slice. We are looking -- we are going to be looking at a
2 series of slices starting at the base of the brain going up
3 toward the top. The other thing I would like to point out is
4 that on CAT scans right is on the left and left is on the
5 right. So that, hopefully, won't confuse you.

6 Q. Thank you, Doctor. So, image number one, what is
7 this slice portraying?

8 A. Well, what we can see here, here you can see the eyes
9 and these bright spots -- first of all, as tissue gets denser
10 and denser, it gets whiter and whiter. So, just for reference,
11 air - you see, for example, in the sinuses - would be black and
12 this, on these images, bone will be white, denser than air.
13 Gray is soft tissues.

14 So, what we are seeing here is actually a cervical
15 vertebrae. This is lower than the brain, and this gray tissue
16 right here is the spinal cord. We see the eyes. The bright
17 white are the lenses of the eyes, and that is about all that's
18 worth mentioning on that slice.

19 THE COURT: Ms. Egan, I'm not sure the way this
20 is positioned and the way the Doctor is positioned that
21 everybody can see the screen. So, it's your witness.
22 It's your presentation, but I just bring that to your
23 attention.

24 MS. EGAN: Certainly, Judge. Would the Court
25 inquire as to whether the jurors are having difficulty

1 viewing the images?

2 THE COURT: When the Doctor is leaning in to
3 explain, I believe he's blocking part of the screen so --

4 THE WITNESS: I could go to the other side and
5 just block Mr. Coffey.

6 MS. EGAN: Let me see if I can come up with a
7 suitable arrangement for all, Judge. Would the Court
8 inquire -- can all of the jurors see the image now?

9 THE COURT: The jurors are indicating that they
10 can.

11 A. Again, I just want to emphasize that the brightness,
12 the whiteness, the darkness can be manipulated. If you were
13 looking at density -- so, if the densest thing you can
14 imagine - let's say land - is here and air is down here, the
15 image could show just simply total black and totally white. If
16 you divide that whole range into just two images, everything
17 from the middle down to the bottom is completely black and
18 everything -- but above that would be completely white. That
19 wouldn't be very useful. So, we divide it up into gradations
20 of white to black and everything in between, but you can also
21 change that level. If you are interested, for example, just in
22 looking at bone, you could move the whole window up toward the
23 density that that bone is at and divide that up into more. So,
24 we are going to be doing that a little bit as we go through.

25 Q. Can I just clarify, Doctor? When you say that the

1 image and densities can be manipulated, do you mean you are
2 changing the data or you are changing the view of the data?

3 A. You are not changing the data. You are just changing
4 the presentation, the whiteness or blackness or grayness to try
5 to tweak it to get the detail that you want to.

6 Q. Thank you.

7 A. I could give an example.

8 Q. Please do.

9 A. It just shows you here the window level. It's set to
10 look at the brain now, but if we set it to look at the bone,
11 you can see how it changes and you can see, where this was
12 completely bright white before, now you can see bone and you
13 can see marrow there. Now I just have to get it back. So, we
14 are going to window width and level and we are going to go to
15 brain. I'm going back to where we were.

16 Q. Are we ready to move on to image number two?

17 A. We are.

18 Q. Do you mind advancing the computer, Doctor?

19 A. All right. Okay. This is image two of 28. It
20 doesn't show a whole lot of difference. This is spinal cord
21 still. These are the lobes. This is air, and then this is the
22 nose, pharynx. You can see a little bit of the ears here.

23 Q. Let's move on to image three. What do you see in
24 this image?

25 A. We are still seeing spinal cord. We are getting near

1 the base of the skull. We are seeing a little bit of the eyes.
2 This right here is a little bit of the gyrus rectus, which is
3 the underneath surface of the frontal lobe of the brain, and
4 this is a little bit of the temporal lobes which sit on the
5 sides of the brain; but nothing else to remark on there, no
6 abnormalities.

7 Q. Let's move on to image four. And what is portrayed
8 here, Doctor?

9 A. Not a whole lot. A little of the temporal lobes,
10 frontal lobes. This is still within the orbit. This very dark
11 stuff is periorbital fat, probably the spinal cord and lower
12 brain stem right here. Now you can start to see a little
13 difference. Now, one thing also to point out is that you can
14 see that this gray part here that we are seeing is larger than
15 this. That's because the child -- and this doesn't look like
16 this because the child isn't quite straight in the machine.
17 He's a little bit tilted. One side is a little lower than the
18 other side. And here you can see some dark areas here. We
19 will explore that at higher cuts.

20 Q. Let's move on to image five.

21 A. Here we can see some abnormalities. This is image
22 five of 28. And you can see here, this is brain, this gray,
23 and this is fluid of some nature between the brain and the
24 bone, and you can also see - remember, this is left side; this
25 is right side - that it is a little denser, a little whiter on

1 this side compared to this side. You can also see more of this
2 dark around the temporal lobe on that side particularly. That
3 is also some kind of fluid.

4 Q. And approximately where in the head is this image
5 taken?

6 A. Well, this would be inside here (indicating), just
7 inside the frontal areas, and these are more or less where your
8 ear is - and see, this is ear - so a little bit in front of the
9 ear.

10 Q. Let's move on to image number six.

11 A. Okay. So, now we can see more of this fluid that is
12 surrounding the brain. There is normal fluid around the brain.
13 It's called cerebrospinal fluid or CSF. And although it's not
14 exactly like water, if you look at it in a glass, it would look
15 like water. It's clear fluid, normal. It has some proteins in
16 it and it has some electrolytes and various other things, but
17 it looks like water. And, typically, water would be a little
18 darker than this. So, there's something -- this is not normal
19 looking CSF. It's got something that increases the density,
20 makes it a little grayer, a little whiter. So, it has
21 something mixed in it.

22 Q. So, what level would regular CSF read as?

23 A. It would look blacker than this. This is air. It
24 wouldn't be that black, but it would be blacker than that
25 probably.

1 Q. Let's move on to image seven.

2 A. We can probably move a little quicker if you want to
3 skip some of these.

4 Q. Certainly.

5 A. Okay.

6 Q. Just for the record, which image is this?

7 A. This is image nine. So, in this image, we can again
8 see that there is some kind of a collection surrounding the
9 brain. This is a normal structure. This is called a fourth
10 ventricle. It's a normal cavity inside the brain where the
11 cerebrospinal fluid flows, and these are what are called the
12 temporal horns. This is also part of the ventricular system
13 inside the brain where there is normal cerebrospinal fluid.
14 So, these are normal structures. And there's also
15 cerebrospinal fluid outside the brain between the arachnoid and
16 pia. So, there is -- the brain is floating, if you will.
17 That's probably not a good term, but surrounded by
18 cerebrospinal fluid in normal conditions.

19 Q. Since you mentioned it, Doctor, I'm going to
20 interrupt. What is the pia and what is the arachnoid?

21 A. Well, if you look at them on the microscope, they are
22 similar. There's no difference between the pia and the
23 arachnoid. The pia is a very thin translucent membrane that
24 is -- it's right on the surface of the brain; in some cases,
25 adherent to the brain surface. The arachnoid is separated from

1 the pia and there are little strands of pia-arachnoid that
2 extend between them, and arachnoid means spider-like,
3 basically. So, those little fingers of stuff look like a
4 spider web. So, that's why it's called the pia-arachnoid, and
5 it's between the pia and arachnoid that the cerebrospinal fluid
6 flows.

7 Q. Does the arachnoid refer to another membrane?

8 A. It is another membrane, but it's identical to the
9 arachnoid. It's just the location that is different. So, the
10 pia is right on the surface of the brain. Then it is the
11 cerebrospinal fluid and the arachnoid that encompasses the
12 cerebrospinal fluid. And then on top of that is the dura
13 mater, which is a thicker fibrous layer that sits right on top
14 of the arachnoid. So, in normal circumstances, there's no
15 actual space, meaning they are together like this (indicating),
16 but if something happens, something gets injected into that
17 space, then it becomes a real space. That's the subdural
18 space, and then the skull sits on top of the dura. And again,
19 there is no -- there is a potential space between the dura and
20 the skull, but under normal conditions, there's no real space
21 there.

22 Q. Now, is there anything else of clinical significance
23 that you note in this image?

24 A. Yeah. I'm going to try -- it's probably difficult to
25 see from where you all are, but this fluid collection is a

1 little brighter, a little whiter than this side. Can you
2 appreciate it? There's also a -- maybe we can find it better
3 on another image. This is a little better. There is a --

4 Q. Just for the record, Doctor, which image is this?

5 A. This is image ten.

6 Q. Thank you.

7 A. Let me get rid of those. Again, I apologize, because
8 it's difficult to see, but there is this collection here, and
9 then underneath it, there's a little dark. There's a darker,
10 little bit of a darker -- is that visible at all from where you
11 are? So, I would interpret this as showing that -- between
12 here and here is the subdural space and this is the
13 subarachnoid space. That's what we see here, this darker.

14 Q. And the shading, is there any significance to the
15 shades of gray on this image?

16 A. Well, it means that this is denser than this side. I
17 think it may be even more clear here. You can see this darker
18 rim. That's right on -- closer to the surface of the brain.
19 That, I believe, is the subarachnoid space and this is the
20 subdural space. Now, here you can see ventricles, the normal
21 spaces, and you can see that the fluid is darker. That's more
22 toward normal. I can't say that it's completely normal, but
23 it's certainly darker than either one of these. This is more
24 like what normal cerebrospinal fluid looks like.

25 And again, you can see that -- now this is the back

1 of the head, the occipital lobe right here. You can see here
2 this fluid space and it's brighter, significantly brighter and
3 larger than on the left side; and here, also, you can see it's
4 even brighter right there. So, there are some gradations of
5 the density as we go from front to back, and that has to do
6 with -- what is causing that injury is density being affected
7 by gravity. This is a child who has been unconscious and lying
8 on his back.

9 So, if, for example, there is blood or protein fluid,
10 that would settle out. So, you know, if you put -- you know,
11 mix something in water, some - I don't know - orange juice or
12 something and let it sit there, all the pulp would go to the
13 bottom of the glass. That's probably what is happening here.

14 Q. Doctor, which image is this?

15 A. This is image -- one of these days, I will remember
16 to say that first. This is image 14.

17 Q. What does the increased brightness in that area
18 indicate to you?

19 A. Well, theoretically, it just means it's denser than
20 something that's darker. It's more dense.

21 Q. What could cause that increase in density?

22 A. Blood. More of the same, as you can see, again, the
23 difference, but this extends over the whole surface of the
24 brain. And I would also point out -- this is image 20 of 28.

25 Q. Thank you, Doctor.

1 A. If you leave the brain for a second and just look at
2 the bone. A young infant's skull is not one giant bone. There
3 are multiple bones. There are two parietal bones, two frontal
4 bones, occipital bones, temporal bones and others. Where bones
5 come together, flat bones come together are called sutures.
6 Usually, they interdigitate like a zipper; but in a very young
7 child, they are less zig-zaggy and they more abut each other.
8 When you have pressure inside the head by some accumulation of
9 fluid or swelling of the brain, it can push the sutures apart,
10 spread the sutures apart. So, that is a sign of, probably,
11 abnormal pressure inside the head; and this area here, you
12 don't see the bright white bone. This is the anterior
13 fontanelle, the soft spot babies have.

14 And this is the -- these are the two coronal sutures
15 that separate the frontal bones from the parietal bones, and
16 they are -- and these are the lambdoid sutures. The names are
17 not important, but they are spread apart, indicating a problem
18 with pressure inside the head. That is about -- everything
19 else would be redundant to talk about. And there are no -- a
20 fracture would appear as a dark line in the bone. You would
21 see those fractures.

22 Q. Doctor, what color would fresh or old blood appear as
23 on the scan?

24 A. Okay. Acute blood, acute clotted blood typically is
25 bright white; and ferrial blood can ultimately look the same as

1 cerebrospinal fluid. So, it changes over time. The cells are
2 metabolized. The proteins and whatever leak out and the body
3 takes it away; and over time, it becomes more and more and more
4 and more like cerebrospinal fluid, looks on the scan more and
5 more like cerebrospinal fluid.

6 But in children particularly -- for example, if there
7 is an injury that causes subdural bleeding, that injury can
8 also sometimes tear the arachnoid membrane - remember, it's
9 very thin and transparent - in which case, cerebrospinal fluid
10 can mix with the blood and, if you will, dilute it and make it
11 look less bright. So, that's why it's sometimes very difficult
12 to age very precisely subdural hematomas on the basis of a CT
13 scan.

14 Q. And Doctor, based on your experience and review of
15 this scan, do you have an opinion as to whether hematomas are
16 present in [REDACTED]'s head?

17 A. I do.

18 Q. And what is that opinion?

19 A. I believe that he has bilateral subdural hematomas
20 with more acute blood or fresh blood on the right side.

21 Q. And what is it that you see in the scan that leads
22 you to that opinion?

23 A. Well, I believe that --

24 MR. COFFEY: Judge, can I have him identify what
25 we are looking at?

1 A. Yes. I'm looking again -- this is image 24, and I'm
2 looking at the fluid surrounding the outside of the brain and
3 the inner hemisphere fissure around the brain on both sides.
4 This is not normal. There is normally not that giant space
5 there, and I believe that -- this is subdural space on the
6 other side and this is brighter, so it's got more -- it's
7 denser, and I believe the explanation for that is blood.

8 Q. Thank you, Doctor.

9 A. More acute blood.

10 Q. Thank you. At this point, Doctor, I believe we are
11 done with the scan, so you can take your seat.

12 THE COURT: Members of the jury, would you like
13 to take a break at this point in time? I believe there's
14 some more time left with this witness. Would you like to
15 take a break at this time? Okay. We will do that.

16 Members of the jury, we will take a 15-minute
17 break at this time. Don't discuss the case. Don't form
18 any judgments or opinions. Don't read or listen to any
19 media accounts. If anyone attempts to improperly
20 influence you, report that directly to me.

21 MR. COFFEY: Judge, can you admonish --

22 THE COURT: You are all set.

23 (Jury excused.)

24 THE COURT: Be seated, please. Doctor, because
25 you are still giving sworn testimony in this case, I will

1 ask that during this break you please not discuss your
2 testimony or the case with anyone, including the attorneys
3 involved.

4 THE WITNESS: Yes, sir. I understand.

5 THE COURT: You may step down.

6 (Brief recess taken.)

7 (Albany Medical Center Report marked People's Exhibit 21 for
8 identification.)

9 THE COURT: Bring the jury back in, please.

10 MS. BOOK: Judge, if at some point it looks like
11 we are not going to get to Dr. Sikirica for some reason, I
12 would just ask if maybe we can talk about it so we can let
13 him go because he has other work to do but is, obviously,
14 willing to stay here and stay late if we are going to get
15 to him and finish his testimony. But if it comes to a
16 point where it looks like we are not going to get to him,
17 maybe we can talk about it at that point.

18 THE COURT: Sure. We have two hours left. We
19 will see how we go, but that's fine. Okay. Bring the
20 jury in, please.

21 COURT OFFICER: All rise. Jury entering.

22 THE COURT: Please be seated. The sworn witness
23 remains John Waldman. Doctor, I will remind you you are
24 still under oath. Ms. Egan, you may continue.

25 MS. EGAN: Thank you, Your Honor. And Judy, can

1 I have the last question and answer read back?

2 (The previous question and answer were read back
3 by the Reporter.)

4 **BY MS. EGAN: (Continuing)**

5 Q. Doctor, what is a subdural hematoma?

6 A. A collection of blood on the subdural space.

7 Q. Are these collections normally present?

8 A. No.

9 Q. How can they be caused?

10 A. They are caused by trauma, varying degrees.

11 Q. And what is it about the collections that indicates
12 that they are caused by trauma?

13 A. I'm sorry. Could you repeat the question?

14 Q. I will rephrase the question. Can they be caused by
15 accidents?

16 A. Yes.

17 Q. Is there a way to differentiate a hematoma caused by
18 accidents versus one caused by trauma?

19 A. On a CT scan or by looking at an autopsy or overall?

20 Q. We will start with on a CT scan.

21 A. No.

22 Q. Then looking at other clinical signs and symptoms of
23 the patient?

24 A. Well, if there is bruising or evidence of impact and
25 no history of trauma, that certainly raises the issue of

1 inflicted injury. If there's a history of an automobile --
2 high speed automobile accident, then that could explain
3 subdural hematoma; the child walking into someone swinging a
4 baseball bat. I mean, there are many kinds of traumas that can
5 cause subdural hematomas, but you can't tell one from the other
6 by looking at a CAT scan.

7 Q. Based on your review of [REDACTED]'s CAT scan and his
8 medical chart, do you have an opinion as to how these subdural
9 hematomas were caused?

10 A. I do, yes.

11 Q. And what is that opinion?

12 A. I think he sustained a blunt force trauma that caused
13 the subdural hematomas and they caused his death, the child's
14 death.

15 Q. Now, can you tell the age of the hematomas?

16 A. On a CAT scan?

17 Q. Yes.

18 A. No, not precisely. In some cases, you can, and --
19 for example, if that big space were filled with entirely very
20 bright signal, that would indicate an acute subdural hematoma
21 and you could estimate that it happened roughly within hours or
22 a day of the -- of presenting at the CAT scan. Chronic
23 subdural hematomas that are over three weeks or so, typically,
24 in age develop membranes that are visible on pathological
25 evaluation. These membranes get, if you will, thicker over

1 time and are visible and can be seen, certainly, under
2 microscope. So, that's the way of aging subdural hematomas.

3 But in a clinical situation, it's very difficult,
4 particularly, as I mentioned before, in young children, where
5 there can be a mixture of acute blood with cerebrospinal fluid
6 that dilutes it. It makes it look, quote-unquote, more chronic
7 than it actually is.

8 Q. So, were you able to age [REDACTED]'s subdural
9 hematomas?

10 A. No. There was -- appeared to be some fresh blood,
11 probably within a day or two, mixed with CSF. So, I can't
12 precisely age it, no.

13 Q. Now, did the radiologist who performed the scan
14 create a report?

15 A. He did, yes.

16 Q. Did you review that report?

17 A. Yes, I did.

18 Q. Do you recall the findings contained in that report?

19 A. More or less, yes. He described bilateral subdural
20 fluid collections. He didn't characterize the fluid itself.
21 He didn't. Although he subsequently suggested that the
22 collection on the right side, the denser whiter side, he used
23 the term subdural. Now, I think most people reading that would
24 interpret that as subdural hematoma but he didn't actually say
25 hematoma.

1 Q. So, as you recall, the word blood and hematoma are
2 not in that report. Is that correct?

3 A. Correct. Radiologists are looking at densities.

4 MR. COFFEY: I object. There's no question.

5 THE COURT: Sustained.

6 Q. But is it your interpretation of that language in the
7 report, based on your years of experience, that it does, in
8 fact, refer to hematomas or collections of bloody fluid?

9 MR. COFFEY: Object as leading.

10 THE COURT: Sustained.

11 Q. Do you have an opinion as to what the language in
12 that report refers to?

13 A. Yes.

14 Q. What is that opinion?

15 A. Well, the opinion is not separate from my own opinion
16 of interpreting the scan. I believe he was referring to - and
17 I am referring to - subdural hematoma.

18 Q. Now, in your years of practice, have you treated or
19 evaluated babies who had brain bleeds caused by birth?

20 A. I have definitely seen many children who have
21 bleeding from birth, yes.

22 Q. Have you seen subdural hematomas like those on
23 [REDACTED]'s scan in any of the children that were associated with
24 birth?

25 A. Never.

1 Q. Are there other types of disease that could cause
2 subdural hematomas like the one on [REDACTED]'s head?

3 A. I think I mentioned before that there is always some
4 trauma. The question is, in a normal child, it takes
5 considerable force to cause a subdural hematoma. So, if
6 there's some underlying disorder that may predispose to
7 bleeding, then a lesser degree of trauma might lead to a
8 subdural hematoma.

9 Q. Are there any empirical studies that have evaluated
10 accidental versus inflicted head trauma in children?

11 A. There are hundreds of thousands of studies. There
12 was a study that looked at normal birth. I believe they did a
13 consecutive series of children who were delivered, I believe,
14 by all means; normal, spontaneous, vaginal deliveries. I think
15 there might have even been some C-section children in the
16 study. I don't remember the exact, but these were normal
17 children. There was no suspicion -- they weren't preemies.
18 There was no suspicion of intracranial bleeding clinically, and
19 all these children went under MRI scans and there was a number
20 of patients - again, I don't remember the percentage; I believe
21 it was under 50 percent but it was not -- it wasn't point one
22 percent - who actually had extremely thin -- had evidence of
23 extremely thin subdural hematomas. These were all nonclinical.
24 You wouldn't have known they were there, in other words, unless
25 you actually looked for them on the scan. And they were

1 followed and rescanned, and 100 percent of them were completely
2 gone by a month and none of them ever developed into anything
3 clinically significant. They were all just teensy little thin
4 rim of subdural blood. We have known for a very long time that
5 subarachnoid blood, blood in that space between the arachnoid
6 and the pia where the spinal cord is, that's extremely common
7 after normal vaginal delivery.

8 Q. And in those cases, does that subarachnoid blood
9 resolve on its own?

10 A. Yes.

11 Q. Are there any studies assessing accidental head
12 trauma in children from falls?

13 A. From falls?

14 Q. Yes.

15 A. Are you referring to short falls?

16 Q. Yes.

17 A. The definition of a short fall -- it depends on the
18 article but, typically, we can say under four feet, falling off
19 a changing table, falling from a chair.

20 MR. COFFEY: Objection as testifying outside his
21 expertise.

22 THE COURT: Sustained.

23 Q. Judge, have you reviewed -- I'm sorry. Dr. Waldman,
24 have you reviewed such studies in your clinical practice and
25 relied upon them in formulating your own diagnoses of patients?

1 A. Sure. It's a part of the -- it appears in the
2 neurosurgical literature, many of these articles, and I read
3 the literature.

4 Q. Then could you tell us what these studies of short
5 falls have found?

6 A. Well, the predominant feeling is that short falls do
7 not lead to -- short falls can cause skull fractures. This is
8 known. Short falls can lead to death extremely rarely, one in
9 several million. Those deaths, the patients who die from short
10 falls, the majority of the literature indicates that they die
11 from epidural hematomas, which is different from the subdural.
12 It's between the dura and the skull and it's more related to a
13 skull fracture that injures a specific blood vessel on the
14 outside of the dura. So, in the epidural stages, it's arterial
15 blood. It develops rapidly and can lead to death. It's very
16 different from a subdural hematoma.

17 And the other rare cause of death in a short fall is
18 due to an injury to a carotid artery in the neck that leads to
19 thrombosis and, basically, a massive stroke. There are very,
20 very few case reports of children also dying from massive
21 subdural hematoma, usually unilateral, after a short fall; but
22 the vast majority of children who die, where there was a
23 shortfall as an explanation for the injury, have a very
24 different pattern of injury that has been shown. Except for a
25 few outlying physicians, the vast majority of physicians

1 attribute this to nonaccidental trauma. So, extensive retinal
2 hemorrhages, acute subdural hematomas, significant alteration
3 of a neurological function, coma; that, together, without a
4 history of significant injury, like an automobile accident,
5 raises a high level of suspicion for inflicted or nonaccidental
6 injury.

7 Q. Did [REDACTED] have any other signs or symptoms
8 consistent with inflicted head injury?

9 A. He had, as was described by the ophthalmologist,
10 extensive retinal hemorrhages and, of course, he had, you know,
11 profoundly altered neurological condition. He was near death,
12 if not clinically brain-dead, by the time he got to Albany
13 Medical Center.

14 Q. Now, Doctor, are you familiar with a condition known
15 as sepsis?

16 A. Yes.

17 Q. And what is your understanding of sepsis?

18 A. Well, sepsis means a biological organism in the
19 blood.

20 Q. Are you familiar with the term coagulopathy?

21 A. Yes.

22 Q. And what is coagulopathy?

23 A. Coagulopathy is a term used to describe a disorder of
24 clotting, blood clotting.

25 Q. And how about DIC? Are you familiar with that term?

1 A. Yes.

2 Q. And what does that mean?

3 A. DIC means disseminated intravascular coagulation or
4 coagulopathy.

5 Q. And what condition does that refer to?

6 A. Well, sometimes something can trigger the pathway
7 that leads to blood clots. And if that process is widespread,
8 it can consume the proteins that circulate, that actually are
9 involved in the formation of blood clotting. So, if you use
10 them all up, clotting blood, there's none left, and then you
11 can get abnormal bleeding, and that's what disseminated
12 intravascular coagulopathy means.

13 Q. Could coagulopathy have led to the type of subdural
14 hematoma that [REDACTED] had?

15 MR. COFFEY: Object to that. It's outside the
16 areas of his expertise.

17 THE COURT: Sustained on foundation.

18 Q. In your experience, have you treated pediatric
19 patients that have clotting disorders? Have you treated them
20 for head injuries, as well?

21 A. Yes. Severe brain injury is one of the, I guess,
22 common causes of DIC. The brain is a very rich source of
23 tissue thromboplastin, which is a protein that can initiate
24 clotting. So, when the brain is injured and those proteins
25 then get into the bloodstream, they can initiate disseminated

1 intravascular coagulation.

2 Q. So, could a head injury cause DIC?

3 A. Yes.

4 Q. Now, after you finished your consult with [REDACTED],
5 did you provide any additional services or treatment to him?

6 A. No. By the time I saw him, he had no salvageable --
7 he was not salvageable. His neurological condition was as bad
8 as it could be, and it wasn't something that he could recover
9 from.

10 Q. Would you describe him as clinically brain-dead?

11 A. By the second time I saw him, I believe he was or
12 about to be declared clinically brain-dead. When I say
13 brain-dead, I'm not talking about the legal definition in the
14 sense that you have to do a specific series of tests. What I
15 mean to say is that he had no evidence of neurological
16 function. He was in deep coma and his pupils were not reactive
17 to light. He had no brain stem reflexes and no movement. So,
18 neurologically, that is part of the brain death criteria, that
19 neurological -- those neurological findings.

20 Q. Are there any other tests associated with the
21 determination of brain death?

22 A. Yeah. There's several others. They are not all
23 required, but you have to do what's called an apnea test. One
24 of the -- the very lowest functions of the brain stem is to
25 provide a stimulation for breathing. So, when that is lost,

1 there's no breathing, no spontaneous breathing. That's another
2 criteria. That's not something I did in my assessment. So,
3 that is part of the legal determination of brain death. You
4 have to take someone off of the ventilator if they are on it,
5 like [REDACTED] was, and determine that, as the carbon dioxide in
6 the blood builds up, that there is no effort to breathe at all
7 and that, ultimately, happened. But there are other tests.
8 You can do radionuclide or scans where you inject material that
9 goes into the blood vessels and the blood that can be traced as
10 it goes up toward the brain; and if the pressure in that brain
11 inside of the head is high enough, if it's higher than the
12 arterial pressure and the heart is able to push to send the
13 blood into the brain, that nuclear material stops at the base
14 of the skull, never gets into the head. So, that is another
15 test that is sometimes done to determine brain death.

16 Q. What tests did you perform on [REDACTED] to assess his
17 neurological function?

18 A. I would have to look at my notes to see for sure.

19 Q. Doctor, which notes are you referring to?

20 A. I wrote two notes in the chart; one, I believe, on
21 the 22nd and one on the 23rd. I'm probably the only
22 handwriting in the chart that you can read.

23 (Physician Notes marked People's Exhibit 22 for
24 identification.)

25 Q. I'm handing what has been marked People's Exhibit 22

1 for identification to Dr. Waldman. Can you look at that and
2 tell me if those are the notes to which you are referring?

3 A. Yes. I think there's a page two for this.

4 Q. It's a double-sided document. Is that the page two?

5 A. Yes. Those are the two notes.

6 Q. Could you review them to yourself and then let me
7 know when your recollection has been refreshed.

8 A. Okay.

9 Q. Okay. Thank you. Let the record reflect I am taking
10 the exhibit from Dr. Waldman. Now that your memory has been
11 refreshed, Dr. Waldman, what tests did you perform on [REDACTED]
12 to assess his neurological function?

13 A. I did some basic parts of the neurological exam. I
14 looked in his eyes and shown a light in his eyes. His pupils
15 were fixed and unreactive. I checked to see whether he had a
16 gag reflex, which is another brain stem reflex, and that was
17 absent. And I touched his eye with a piece of cotton, touched
18 his cornea to see whether he blinked - that's another brain
19 stem reflex - and he did not; and he had no movement whatsoever
20 to painful stimuli. I also mentioned that he had no
21 spontaneous respirations. That was probably reported to me. I
22 doubt that I checked that myself. I don't have any direct
23 recollection of examining him.

24 Q. And what was your opinion of [REDACTED]'s neurological
25 function?

1 A. That he was -- they should consider a brain death
2 determination.

3 Q. Now, based on your review of [REDACTED]'s records, were
4 you aware of the progress of his decline?

5 A. From the records?

6 Q. Or otherwise, from the records or your experience in
7 dealing with other doctors on the case.

8 A. Well, it's a little difficult, because I don't have
9 any direct recollection of talking to anybody or -- and
10 whatever, and I have reviewed other records. So, I'm not a
11 hundred percent sure how to answer that; but I believe that he
12 was ill for a day or two beforehand. I know now that he did a
13 partial feeding early in the morning, and then some time later
14 in the morning, hours later, he was found unresponsive and 911
15 was called.

16 Q. Were you aware of the time frame between when he was
17 found unresponsive and when the CAT scan was performed?

18 A. I don't recall exactly the time. I think it was that
19 he got to Albany Med and he had been at, I believe, Samaritan
20 Hospital before that. So, I don't know exactly a time. I
21 think it was something -- probably three hours or so, maybe a
22 little bit more.

23 Q. Now, in your opinion, Doctor, could the -- could
24 [REDACTED]'s subdural hematomas have accounted for a rapid decline
25 in his condition?

1 A. Yes.

2 Q. How could that be?

3 A. Well, there's several factors that determine the time
4 frame. An infant is a little bit different from an older child
5 and adult in that the intracranial volume can expand to a
6 degree because the sutures are open. We saw this in [REDACTED]'s
7 case; but there is a limit to that, as well. I mean, the head
8 typically just doesn't get bigger and bigger and bigger
9 forever. The head has no empty space. The intracranial space
10 where the brain is has no empty space. There's either brain,
11 there's blood, normally blood vessels, arteries, capillaries
12 and veins, and there is the cerebrospinal fluid.

13 There are mechanisms as -- for example, let's just
14 say a brain tumor is growing inside the head or a blood clot is
15 accumulating inside the head. The intracranial pressure will
16 not go up initially because the brain has the ability to absorb
17 more cerebrospinal fluid than it produces. So, as some amount
18 of blood is entering the head, into the subdural space, an
19 equal amount of cerebrospinal fluid is displaced, so there's no
20 change in pressure, and there are other mechanisms.

21 But, eventually, these mechanisms can be exhausted
22 where, now, every little bit extra of blood causes a -- I am
23 sorry. Whereas the pressure, as you are putting volume in, has
24 stayed flat. Initially, eventually, when those mechanisms are
25 exhausted, there is a precipitous rise in pressure, and that

1 pressure then kills the brain. It can be high enough, as I
2 mentioned before, to prevent blood from going into the head.
3 The brain doesn't store oxygen or store nutrients. It requires
4 them on a constant basis to maintain a life. So, when that
5 happens, the brain dies.

6 So, in the case of [REDACTED] or anyone, when you see
7 them initially when they are not yet brain-dead, you don't know
8 exactly where they are in that curve or how close. If someone
9 is awake -- let's say [REDACTED] was seen six or eight hours
10 earlier. He might have been very cranky. He might have been
11 sleepy, but he wouldn't have been in deep comma. We know that
12 because he fed. But we wouldn't know where along that line he
13 is. It could be in the next minute that he shoots up. It
14 could be in the next hour he shoots up. So, that's how, even a
15 subdural hematoma that is not occurring instantaneously like
16 some do - not instantaneously, but very rapidly - can
17 eventually lead to brain death.

18 So, I believe that's what happened to [REDACTED]. He
19 had subdural hematoma. He had an additional injury that led to
20 this brighter signal in the subdural space that is more acute,
21 fresh blood that tipped him over to the -- sent him over the
22 balance. He crossed that elbow, that curve, and developed
23 severe increased intracranial pressure that caused his demise.

24 Q. So, in your opinion, is it possible for an infant to
25 function relatively normal for some period of time after

1 sustaining an inflicted subdural hematoma?

2 A. Well, in this case --

3 MR. COFFEY: He was asked a general question. I
4 object to anything further.

5 THE COURT: I don't understand the objection.

6 MR. COFFEY: The question is was it possible
7 that the patient can for a certain period of time. I
8 don't object to the question, but unless he relates it to
9 that question, I object.

10 THE COURT: Well, I haven't heard an answer yet,
11 so -- Doctor, do you understand the question?

12 THE WITNESS: I would like it repeated, if
13 possible.

14 THE COURT: Can we have the question read back?

15 (Whereupon, the pending question was read back
16 by the Reporter.)

17 THE WITNESS: Yes.

18 THE COURT: Mr. Coffey, you have no objection to
19 that. Is that right?

20 MR. COFFEY: No, I don't.

21 Q. And how is that possible?

22 A. Well, as I mentioned, there are mechanisms initially
23 to compensate for the accumulation of this bloody fluid. In an
24 individual case, you don't know, because you don't know the
25 rate at which it's happening. There are a lot of unknowns, but

1 it is possible for someone to have the onset of a subdural
2 hematoma. I mean, this is not an example that's relevant to
3 this case, but in elderly people -- from the time we are born,
4 we are losing brain cells. Our brain is shrinking. And by the
5 time you get to my age or older, your brain has shrunk
6 significantly. You can see it on a CAT scan, and cerebrospinal
7 fluid takes up that space.

8 But without going into great detail, you can develop
9 subdural hematomas from a simple fall sometimes that you don't
10 even remember and yet -- some subdural developing. Once it
11 becomes chronic, then you have these membranes and they can
12 leak blood, or there can be minor leaks and they can get bigger
13 and bigger and bigger very, very, very slowly. So, by the time
14 someone becomes symptomatic, they don't even remember their
15 original injury; it happened maybe months before. That's
16 obviously different from this case, but that's how it happens.
17 It depends on the rate and the size and the ability of the
18 brain to compensate how quickly someone becomes symptomatic.

19 MS. EGAN: If I could just have one moment,
20 Judge? I have no further questions at this time.

21 THE COURT: Okay. Mr. Coffey?

22 **CROSS-EXAMINATION**

23 **BY MR. COFFEY:**

24 Q. Doctor, good afternoon.

25 A. Good afternoon, Mr. Coffey.

1 Q. Doctor, let me start off, do you consider yourself an
2 advocate?

3 A. An advocate?

4 Q. An advocate?

5 A. I am here to give my truthful opinion.

6 Q. Well, I don't think anyone is saying you are
7 untruthful, but that's not my question, and I'm sure you
8 understand it. In this case, do you consider yourself an
9 advocate?

10 MS. EGAN: Judge, I'm going to object to this
11 question.

12 THE COURT: Sustained.

13 Q. Well, are you a scientist?

14 A. Yes.

15 Q. Now, if you or anybody else were a true scientist,
16 would you agree that the facts would take you in whatever
17 direction you would go, regardless if it, quote, helps one side
18 or the next? Would you agree or disagree with that?

19 A. I would agree with that.

20 Q. So, when I asked you that question initially -- let
21 me ask it another way. Do you believe -- and I understand you
22 have an opinion. We will deal with that. But do you believe
23 that your role here is to help the District Attorney's Office
24 in a way that goes beyond science?

25 MS. EGAN: Objection.

1 THE COURT: The objection is overruled. I
2 understand the point of the question now. The objection
3 is overruled.

4 Q. Do you understand my question?

5 A. I guess it depends on your definition of science.

6 Q. Well, you testified -- you looked at 28 images in
7 this case; correct?

8 A. Yes.

9 Q. And that, in a sense, is science; isn't it? In other
10 words, there's objective and subjective things in medicine;
11 correct?

12 A. Correct.

13 Q. Now, what opinions may be may be subjective, but when
14 you looked at the brain, would I be correct that those are
15 objective views of the brain? Would that be a correct
16 statement?

17 A. They're objective determinations of various densities
18 within the brain.

19 Q. And if I ask you your temperature and you take your
20 temperature at 98.6 - and we have asked this question before -
21 that's an objective reading of a person's temperature; correct?

22 A. Correct.

23 Q. If a person says I have a headache or a stomachache,
24 that's subjective; correct?

25 A. Correct.

1 Q. May be caused by an objective problem. But when
2 people describe pain and so forth, that's subjective; correct?

3 A. Yes.

4 Q. Now, Doctor, do you agree with me that you should not
5 testify beyond your expertise?

6 A. Again, I think it's a matter of definition.

7 Q. Well, you wouldn't testify as a gynecologist; would
8 you?

9 A. Absolutely would not.

10 Q. You wouldn't testify as an orthopedist; would you?

11 A. No, but that doesn't mean I don't know anything about
12 it and it doesn't mean that I haven't taken care of patients
13 with fractures or whatever. I wouldn't pass myself off as an
14 orthopedic surgeon.

15 Q. Are you board certified in orthopedics?

16 A. No.

17 Q. Are you board certified in neuropathology?

18 A. No.

19 Q. Are you board certified in infectious diseases?

20 A. No.

21 Q. Are you board certified in pediatrics?

22 A. No.

23 Q. Are you board certified in pathology?

24 A. No.

25 Q. So, you are board certified in neurosurgery; correct?

1 A. I am, yes.

2 Q. And when people come -- when this boy came to the
3 hospital, would I be correct that one of the reasons why you
4 saw this baby is because you were acting within your skill as a
5 neurosurgeon, pediatric neurosurgery; correct?

6 A. Yes.

7 Q. Now, let's talk about what you reviewed before you
8 testified here today. You have given testimony previously;
9 correct?

10 A. In this case?

11 Q. Yes.

12 A. Yes.

13 Q. Would I be presumptuous that you -- when I ask if you
14 reviewed that testimony?

15 A. My testimony?

16 Q. Yes.

17 A. My testimony, I did review, yes.

18 Q. When did you review it?

19 A. Days ago; last week, probably.

20 Q. Were you with anyone when you reviewed it?

21 A. No.

22 Q. Had you met with members of the District Attorney's
23 Office?

24 A. Yes.

25 Q. And when was the last time you met with them?

1 A. Three weeks ago? Two weeks ago, something like that.

2 Q. And where did you meet?

3 A. At my home.

4 Q. And who from the District Attorney's Office came to
5 your home?

6 A. Ms. Egan and Ms. Book.

7 Q. And how many times have they been to your home?

8 A. Once.

9 Q. How long did you meet with them?

10 A. I would guess an hour to an hour and a half,
11 something like that.

12 Q. Had you ever met with either one of them prior to
13 that date?

14 A. Not to my recollection, no.

15 Q. Now, did you make notes?

16 A. No.

17 Q. Did they make notes that you recall? Do you recall
18 them writing in front of you?

19 A. Possibly. I don't recall.

20 Q. Now, were you made aware of the fact that there are
21 other competent -- well, I will take out the word competent.
22 There are other people who have expressed an opinion contrary
23 to yours. Did the District Attorneys tell you about that?

24 A. Contrary to my -- what opinion of mine?

25 Q. The opinion that this baby's death was caused by

1 subdural hematomas. Have you been made aware that there were
2 other people, board certified physicians, who have expressed a
3 difference in opinion with you. Have you been told that?

4 A. Yes.

5 Q. And in terms of your preparation in front of the jury
6 that, presumably, doesn't know much about neurosurgery and
7 these things, in preparation, did you ask to review the
8 testimony of these individuals?

9 A. I didn't ask to review anything.

10 Q. So, you didn't care what they had to say?

11 A. No. I was given stuff, but I didn't ask for it.

12 Q. Okay. Did you read it?

13 A. Yes, I did.

14 Q. And there's a Dr. Jan Leestma and a Dr. Jerome Klein.
15 Do those names sound familiar to you?

16 A. Yes. I had both of those.

17 Q. Have you read their testimony?

18 A. Yes.

19 Q. And you acknowledge that they have come to a
20 different opinion than yours; correct?

21 A. Correct.

22 Q. Okay. Now, do you take the position that because you
23 are Dr. Waldman, a professor of neurosurgery at Albany Medical
24 Center, that your opinion is the only opinion that is
25 important?

1 A. No.

2 Q. You are aware of the fact that Dr. Leestma is a
3 nationally renowned neuropathologist; correct?

4 A. I have no idea what his reputation is.

5 Q. Well, if you read his testimony, he gave his
6 background in the field of neuropathology; didn't he?

7 A. I think I probably skipped that.

8 Q. And Dr. Klein, do you know what his specialty is, or
9 did you skip that, as well?

10 A. I think he is an infectious disease doctor.

11 MS. EGAN: Objection. I don't see the relevance
12 of these questions.

13 THE COURT: Sustained.

14 Q. You are not an expert in sepsis; are you?

15 A. I am not, no.

16 Q. In fact, you have expressly under oath admitted that
17 you are not an expert in sepsis; correct?

18 A. Yes.

19 Q. And in that instance, you would defer, would you not,
20 to a person who is an expert in sepsis?

21 A. Would I defer?

22 Q. Yes, in terms of what sepsis is caused by, its
23 effects and so forth. Would you defer to a person who is an
24 expert in sepsis?

25 A. I think there are people who are board certified in a

1 variety of things who are -- it would depend on what their
2 opinion was. I wouldn't -- just because they are experts in
3 infectious disease, I wouldn't necessarily take everything they
4 say to be truth, just like you are not taking everything that I
5 say about neurosurgery to be true.

6 Q. Well, in this case, whether sepsis leads to bleeding
7 disorders -- and DIC is a bleeding disorder; isn't it?

8 A. Yes.

9 Q. And whether sepsis, which is an infection that
10 involves the -- a person's system; correct?

11 A. Yes.

12 Q. And what is septic shock?

13 A. Septic shock is a condition where an infection
14 overwhelms the body's ability to function. It may shut down
15 the kidneys. It may shut down the liver. It may cause
16 meningitis in the brain. It may cause disseminated
17 intravascular coagulopathy. It can do a lots of things that
18 can cause the body to shut down. Shock means the blood
19 pressure is low and the patient is not adequately oxygenating
20 and getting nutrition.

21 Q. Now, the sepsis which can cause meningitis -- which
22 is an inflammation of the meninges of the brain; correct?

23 A. Yes. Well, the infection is typically within the
24 cerebrospinal fluid and those membranes bound the -- bind the
25 boundaries of the cerebrospinal fluid.

1 Q. Have you ever in your practice, Doctor, treated
2 infants with septic shock?

3 A. I have been involved -- not that I was treating them,
4 but I have been treating patients for neurosurgical issues who
5 have had septic shock.

6 Q. And in that case, have you referred those patients to
7 the patients -- or the physicians who are dealing with them to
8 pediatric infectious disease experts?

9 A. Yes, I would. If it were my patient who I thought
10 had septic shock, I would refer it to a pediatric infectious
11 disease doctor.

12 Q. Which is what Dr. Klein is; correct?

13 A. Yes.

14 Q. Okay. Now, on the question of whether sepsis can
15 lead to a bleeding disorder, you are not an expert on that;
16 correct?

17 A. Well, I mean, there's certain things that any doctor
18 knows, and I do know that DIC can be caused by sepsis, if
19 that's what you are asking me.

20 Q. Well, I'm talking about bleeding disorders. Can
21 sepsis -- whether or not most cases of sepsis leads to bleeding
22 disorders, you are not an expert in that; correct?

23 A. When you say most cases, yes, I wouldn't know how to
24 answer that question.

25 Q. Okay. And in this case with [REDACTED], he developed

1 meningitis, didn't he, or don't you know; or no, for that
2 matter?

3 A. I'm not sure that he did develop meningitis.

4 Q. Did he -- I will get to that. The -- let's talk
5 about the -- this case in terms of [REDACTED]. We looked at the
6 CAT scans which you reviewed. And there was a report issued by
7 a Dr. Hoover. Is that correct?

8 A. Yes. That's the official report.

9 Q. That's the official report. And that's the report by
10 the neuroradiologist; correct?

11 A. That is the report of Dr. Eric Hoover, and I believe
12 he is a board certified neuroradiologist, but I'm not sure.

13 Q. All right. But anyway, you have worked with him in
14 the past; correct?

15 A. Yes.

16 Q. And have you ever talked to Dr. Hoover about this
17 matter?

18 A. No.

19 Q. Now, I understand that you can read -- and no one is
20 disputing the fact that you can read a CAT scan. If you really
21 wanted to know more about certain brain tissue, an MRI would be
22 even more specific; wouldn't it?

23 A. In certain circumstances, it would. I think -- you
24 know, an MR is not looking at density; it's looking at the
25 different parameter. So, certain kinds of fluid, for example,

1 might look different; and, so, an MR could add something in
2 certain cases.

3 Q. Well, in this case, Dr. Hoover certainly thought it
4 might add something; right?

5 A. I don't know that he did. I don't recall that part
6 of the statement. Well, yes, he did. I do remember. Yes, he
7 did.

8 Q. And you knew when you testified today that I was
9 going to ask you questions about your treatment and the
10 findings made, and you certainly had to know that I was going
11 to ask about Dr. Hoover's report; correct?

12 A. Well, I presumed you probably would, yes.

13 Q. Pretty good guess, right, or no?

14 A. Yeah. No. Go ahead.

15 Q. Now, Dr. Hoover, in his report, indicated that there
16 are large bilateral extraaxial fluid collections slightly
17 larger on the right. I will show you. Do you want me to?

18 A. No. That's fine.

19 Q. Posteriorly - which is the back; right - on the right
20 side - and I understand they are reverse on the CAT scans - and
21 over the upper aspect of the right cerebral convexity. The
22 fluid is distinctly denser than on the left, which probably
23 indicates it is a large subdural collection. Correct? That's
24 what he wrote?

25 A. That's what he wrote.

1 Q. Do you agree or disagree with that?

2 A. I agree with it.

3 Q. On the right, it is unclear whether the fluid is
4 subdural or merely subarachnoid. Do you agree or disagree with
5 that?

6 A. I don't disagree with it.

7 Q. Now, the distinction can easily be made - I'm going
8 to repeat that - the distinction can easily be made with MRI.
9 That's what he said.

10 A. Yes.

11 Q. Do you think he's wrong about that?

12 A. No. I don't think he's wrong about it.

13 Q. Now, with regard to the fluid, he saw more fluid on
14 the right than on the left; correct?

15 A. Yes.

16 Q. And with regard to the right, you don't know how much
17 blood is in there; maybe two percent, one percent? You don't
18 know how much blood is in there, right, or do you?

19 A. No.

20 Q. You don't?

21 A. You mean blood versus a mixture of cerebrospinal
22 fluid? Correct.

23 Q. On a percentage basis; correct?

24 A. Correct.

25 Q. Now, if it's, say, one percent or five percent or

1 maybe less than ten percent of blood, that's not a lot of
2 blood; is it?

3 A. Inside the head, it's still a lot of blood, but it's
4 relatively less blood than the overall size of the collection,
5 yes.

6 Q. And that blood that may have existed at that point --
7 and he never, by the way, indicated in his report that the
8 fluid was in any way bloody; did he?

9 A. Right. He was a typical radiologist who went -- he's
10 looking at densities. That's how he reported it.

11 Q. So, he's typically insufficient in his reporting?

12 A. No, not insufficient.

13 Q. You need a neurosurgeon like you to fill it in for
14 him. Is that what you are telling me?

15 A. No. Well, when he referred to subdural, I think he
16 may have been referring to a subdural hematoma.

17 Q. He may have?

18 A. Most of the time in discussing -- when people say
19 subdurals, most of the time we are talking about subdural
20 hematomas. That's conjecture. I don't know what he was
21 thinking.

22 Q. So, now we have - and I appreciate this - conjecture
23 that he may have been, may have been referring to subdural
24 hematoma; correct? Right?

25 A. Yes.

1 Q. You just told us.

2 A. Yes.

3 Q. He might not have been; right?

4 A. He described an extraaxial fluid collection. That's
5 how he described it.

6 Q. And it's conjecture that he's referring to a subdural
7 hematoma; right?

8 A. Right. And then he referred to it as likely
9 subdural. I'm not sure likely is the term.

10 Q. He said probably subdural.

11 A. Probably subdural.

12 Q. In any event, you are speculating - and we are forced
13 to speculate - as to whether he meant a subdural hematoma;
14 right?

15 A. Correct. He might have been referring to the space
16 rather than -- subdural space versus -- or subarachnoid space.

17 Q. And one way to find out would be, of course, if the
18 District Attorney's Office or you, for that matter, were to
19 call Dr. Hoover and say to Dr. Hoover, "By the way, Dr. Hoover,
20 what do you mean by this?" That's an easy way to find out;
21 right?

22 MS. EGAN: Objection.

23 THE COURT: What basis?

24 MS. EGAN: Relevance and basis of knowledge.

25 THE COURT: Overruled.

1 Q. Correct?

2 A. An easier way would be to talk to the pathologist.

3 Q. Oh, you think the pathologist would be --

4 A. Not --

5 Q. Doctor, please. Are you telling me that you think it
6 would be better to talk to the pathologist about what the
7 radiologist thinks than talking to the radiologist himself?
8 Are you telling me that?

9 A. Today, yes.

10 Q. All right. Now, let me go back, if I can. We know
11 from your testimony -- I think we know. If I'm wrong, Doctor,
12 you correct me. I'm sure you know you can. You have testified
13 before; correct?

14 A. I have, yes.

15 Q. Did you ever testify in behalf of an accused in a
16 criminal matter?

17 A. Yes, I have.

18 Q. How long ago?

19 A. In a criminal trial?

20 Q. Yes.

21 A. I couldn't even tell you. I did recently participate
22 in a 440 hearing.

23 Q. Okay. All right. Let me go back. Now, 440 hearing
24 is a person who is attempting to have his conviction
25 overturned; right?

1 A. Yes.

2 Q. Let me go back, if I can, though. Let me walk
3 through this, if you don't mind. You were nice enough to
4 explain and go through the images with us. And the ventricles
5 are those two little horns that come out in your head?

6 A. They are within the brain substance. They look
7 like -- yeah. I guess you could describe them as little horns.

8 Q. I don't know if that's the right way to describe it.
9 But in any event --

10 A. That's part of the ventricular system we were looking
11 at.

12 Q. Now, these ventricles which are on the images -- when
13 [REDACTED] was brought to Albany Med, do you know when the CAT
14 scan was performed on the 22nd, what time?

15 A. I do not recall that, no. I believe it was soon
16 after -- I believe he was brought directly -- bypassing the
17 Emergency Department, brought directly to the Intensive Care
18 Unit. I would imagine there was some amount of time and then
19 he went down for a scan.

20 Q. And there's only one CAT performed; correct?

21 A. That's my understanding, yes.

22 Q. Okay. And would I be correct -- and I know you have
23 issued a report in this case, which we have. In your report,
24 which is dated 9/22, that is your interpretation of the CAT
25 scan?

1 A. Well, again, I don't have any direct recollection. I
2 can only go by what I read and what my usual practice is, but
3 it would be inconceivable that I didn't look at the CT myself
4 and that that would be my interpretation.

5 Q. Okay. So, as you sit here today, your best
6 recollection almost six years later is that that report that
7 you have in front of you --

8 MS. EGAN: Objection to referring to the
9 document as a report. I believe it's notes.

10 Q. All right, notes.

11 A. Yes.

12 Q. I will withdraw that. I apologize. Your notes, that
13 constitutes your findings of what you believe you saw on the
14 CAT scan; correct?

15 A. Yes. That's my interpretation of the CAT scan.

16 Q. Now, Doctor, at the time that you did that, would I
17 be correct that you believed at that moment that this boy's --
18 what you characterize as a subdural hematoma, was caused by
19 trauma. Would that be a fair statement?

20 A. Yes.

21 Q. And you believed at that time that he, [REDACTED], being
22 four months old, had suffered trauma at the hands of somebody
23 else whom you didn't know at the time; correct?

24 A. Well, I had no history of a mechanism of injury.

25 Q. I understand that.

1 A. So, I made no assumptions about it.

2 Q. Now, having said that, having -- and you know as a
3 neurosurgeon that that -- your notes and any report you may
4 have issued would necessarily go in the chart and would be
5 viewed by people subsequently, and they would be important in
6 terms of your findings; correct?

7 A. Yes.

8 Q. You don't start -- on a matter of this seriousness,
9 you don't --

10 A. I mean it's any -- I try to be accurate and truthful
11 when I write notes no matter what the case.

12 Q. And you are not going to guess about something?

13 A. In other words, I don't change my notes because I
14 think maybe this will come to trial.

15 Q. Okay.

16 A. I'm not sure that's what you were suggesting, but no.
17 I understand the implications of what I'm doing and I try to be
18 honest and forthright when I write my notes.

19 Q. And that's what I'm asking. And I'm not suggesting
20 that. You would write down what you believe to be the case;
21 correct?

22 A. Yes.

23 Q. And later, just because there's a criminal trial or
24 you talk to District Attorneys, whatever, if you held a view,
25 you are not going to necessarily change it or alter it to fit a

1 theory of the prosecution; correct? Would you agree with that?

2 A. Oh, absolutely.

3 Q. Now, there may be facts that you learn later which
4 may --

5 A. Right.

6 Q. Which you might with any expert. In other words, you
7 could come to an opinion, talk to an expert, look at a CAT scan
8 or an MRI - I'm not going to call you by your first name - but
9 they might say, "Well," and you say, "Okay, maybe"?

10 A. Yes, yes.

11 Q. Now, you talked about the aging of the subdural;
12 right? And there was, what, one subdural hematoma here, if you
13 can answer that? Can you answer that yes or no?

14 A. Well, I believe there were bilateral subdural
15 hematomas. The subdural space actually is one space.

16 Q. All right.

17 A. But what I mean by bilateral, they were over both
18 hemispheres.

19 Q. Well, Dr. Hoover does not note any density on the
20 left side. He -- reading his report, he's not suggesting
21 there's any blood on the left side; is he?

22 A. No. What he's saying is that the fluid collection
23 could be, on the left side, either subarachnoid or subdural.

24 Q. All right.

25 A. But he -- on either side. He never uses the term

1 blood or hematoma. He uses collection.

2 Q. Fair enough. But the collection, really, that he's
3 talking about, the density occurs on the right side; correct?

4 A. There's fluid on both sides that have density
5 different from cerebrospinal fluid. So, even if it's all
6 subarachnoid on the left, it's not normal cerebrospinal fluid.
7 It's not normal fluid. It's abnormal. The question is whether
8 it's in the subdural space, the subarachnoid space, equally
9 divided. He doesn't -- he's hedging his bets on that one.

10 Q. And, so, when you talk about the brain, it's like a
11 container, nothing separating it. So, there's some fluid
12 washing around and mixing in the brain; correct? So, there's a
13 little more -- I know that's kind of basic, but what I'm
14 getting at is this: [REDACTED] has a subdural hematoma, and
15 there's evidence, according to your testimony, more dense, more
16 fluid on the right, more blood on the right than on the left;
17 correct?

18 A. I would interpret it that way, yes.

19 Q. All right. Now, let's assume I take a four-month-old
20 baby - all right - and I take a four-month-old baby and I lift
21 him - I'm six feet tall; well, 5-11 and three-quarters - and I
22 take that baby and I throw that baby on the floor, hits his
23 head. Good chance that baby is going to get a subdural
24 hematoma; right?

25 A. It certainly is a possibility, yes. That kind of a

1 trauma can cause a subdural hematoma.

2 Q. Now, if I go less than 17 inches and do that, the
3 very good likelihood is that it's not going to cause a subdural
4 hematoma; right?

5 A. What exactly are you doing?

6 Q. I'm dropping the baby on the floor less than --

7 A. Just dropping?

8 Q. Dropping.

9 A. Not --

10 Q. Not --

11 A. Not slamming.

12 Q. And the baby falls.

13 A. That would be unlikely.

14 Q. Now, let me talk about throwing it from above. And
15 you have used the word in the past that, in your opinion, that
16 this baby suffered a serious application of force; correct?

17 A. I don't recall the terms.

18 Q. Do you want me to read it to you?

19 A. I think you just did. I would not dispute that's
20 what I said.

21 Q. So, we are talking about a serious application of
22 force. We are talking about an application of force that is
23 going to cause a subdural hematoma; right?

24 A. Yes.

25 Q. Now, if you get a concussion -- since you have used

1 the example of older people. Now we know there are all kinds
2 of lawsuits by the NFL and all those people. And you get a
3 professional boxer, for example, and he gets hit and gets
4 knocked out. He has a concussion; right?

5 A. Yes.

6 Q. Or you get some of these football players, which are
7 now worried about getting hit in the head and walking around
8 half cockeyed, they have had a concussion; right?

9 A. Meaning they are not unconscious but they have been
10 hit in the head?

11 Q. Yeah. And they don't know what day of the week it
12 is?

13 A. Yes. That would be a concussion, yes.

14 Q. Right?

15 A. Yes.

16 Q. And that's an alteration of mental consciousness;
17 isn't it?

18 A. Yes.

19 Q. Right?

20 A. Yes.

21 Q. And what happens is that brain has suffered a severe
22 insult; right?

23 A. It's -- well, it depends on what you mean by severe,
24 but enough to produce a concussion, yes.

25 Q. And when you played football at Yale -- you are very

1 familiar with concussions; right?

2 A. Yes, I am.

3 Q. Now, it's no different for a child who is four months
4 or a gentleman, man or woman who is 80 years. You take that
5 kind of force, and you deliver that to that person enough to
6 cause a severe application, a serious application of force
7 using your terminology, you are going to see some physical
8 manifestations of that; aren't you?

9 A. It depends on what you mean by physical
10 manifestations. You mean on the skin?

11 Q. No, either on the skin or the child may have -- the
12 person will have -- either the eyes will open up; they will
13 have twitching. You take that kind of force in a person, isn't
14 it true that that person, with a reasonable degree of medical
15 certainty, is going to display some outward signs of having
16 suffered a severe head injury? Isn't that true?

17 A. You mean immediately or for some period of time?
18 Yeah. I would agree, yes.

19 Q. You would agree?

20 A. Yes.

21 Q. Now, tell me something. Do you have children?

22 A. Grown children. They are still my children.

23 Q. Fair enough. What I was getting at is this: I don't
24 know. When you were younger, you and your wife -- but in your
25 practice, generally speaking, when people bring kids into the

1 hospital, it's the mom who generally does it, right, or no?

2 A. No. I would say certainly more than 50 percent of
3 the time but --

4 Q. And would you agree with me that moms -- and I'm
5 using moms. It could be any parent. But mothers, they are
6 very good historians. They are not always perfect but --

7 A. Well, yes.

8 Q. I understand there's qualifications.

9 A. Yes, yes.

10 Q. Let me do another one.

11 A. The other way is when the mother tells me there's
12 something wrong, I believe the mother.

13 Q. And when you take -- in your position as a pediatric
14 neurosurgeon -- I understand all the x-rays and CAT scans and
15 everything else. But even with all the new advances in
16 medicine, history, history is still a critical component of any
17 clinical picture; isn't it?

18 A. Yes, it is.

19 Q. Doctors can say all they want. Doctors who don't
20 care about patients - I know you do - but who don't want to
21 deal with patients -- but you want to know what is going on
22 with a patient, especially a newborn, a four-month-old; talk to
23 mom to find out from mom what's been going on with him; "How
24 has he been" and all that. Correct?

25 A. If you have the opportunity, yes.

1 Q. If you have the opportunity. Now, do you know, as
2 you sit here today, whether mom ever reported to anyone to this
3 very moment that her son, [REDACTED], ever displayed an altered
4 state of consciousness before the weekend of September 21st?
5 Do you know that?

6 A. I believe I do know that.

7 Q. The answer is she never did; correct?

8 A. No, she did.

9 Q. She did?

10 A. I don't know who she told or exactly what she told.

11 Q. Before that weekend, it is your understanding that --
12 by the way, the mother has testified in this case?

13 A. Yes. I have no idea what she testified to. So, I
14 guess it's vague enough in my mind that I don't know for sure.

15 Q. If I were to tell you that the mother, prior to that
16 weekend, has never reported -- not to doctors, not to nurses,
17 not to us, not to this jury today or this week; that she has
18 testified that prior to the weekend of the 21st, her son never
19 displayed any altered state of consciousness. Would that have
20 an effect upon your analysis; yes or no?

21 A. It would have an effect on my analysis, yes. I'm not
22 going to put my fingers in my ear and not hear it. I would
23 listen.

24 Q. Okay. Now, I want to ask you something else, if I
25 can. I want to go back to this subdural hematoma. I think you

1 told us -- and you know that there's -- that I disagree with
2 your analysis. But nonetheless, I'm going to accept your
3 analysis for the moment; that [REDACTED] suffered a subdural
4 hematoma at some point in time in his life. All right?

5 A. Yes.

6 Q. That subdural hematoma that you have aged, and you
7 have seen it on the CAT scan, was more than three weeks old,
8 wasn't it, because it was chronic?

9 A. No. I don't agree with that.

10 Q. Well, you don't know how old it was; correct?

11 A. Yes. What I did say, I believe today, is that that
12 bright fluid is bright enough. It's brighter than the density
13 of the brain. So, that is very suggestive to me that that's
14 acute blood. So, I would -- and I think I said that in my
15 testimony earlier; that it was probably a day or two. I could
16 time that to a day or two.

17 Q. Did this subdural -- was that enclosed by a
18 neovascular membrane? It was; wasn't it?

19 A. To my knowledge, no.

20 Q. It was not?

21 A. No, it was not.

22 Q. Now, you have been asked this opinion and given this
23 opinion that, aging the subdural, that you are not able to age
24 it. Do you agree or disagree with that?

25 A. Well, I just qualified it. I can't give, you know,

1 an hour or a day, but my opinion is that there was enough fresh
2 blood in that -- or the scan showed hyperdense - by that, I
3 mean denser than the brain - fluid that is consistent with
4 fresh blood, and that is probably within a day or two.

5 Q. Doctor, I'm going to ask you if you recall being
6 asked this question and giving this answer. All right?

7 A. Yes, sir.

8 Q. At a prior time. "Doctor, based upon your experience
9 and training, are you able to determine the age of those
10 collections of bloody fluids?

11 "Answer: In circumstances where there is a bleed,
12 for example, into the brain itself, or even into the subdural
13 space, other than in infants or, I will say, when there is an
14 acute hemorrhage into the subdural space, without mixing with
15 cerebrospinal fluid, the blood that is up to a week old will
16 appear bright, brighter than the brain. So, it will appear
17 white. Over time, that blood undergoes -- it breaks down and
18 becomes more and more borderline over time. From about a week
19 to three weeks, the density of that will be almost like brain
20 tissue. It will be gray. So, it will go from bright white to
21 gray; and after that period of time, it will appear dark. So,
22 you could say, if you knew that there was no mixture of fluids
23 in there, that this was chronic. However, when you -- and in
24 particular, the instance of infant subdural hematomas, there's
25 so much cerebrospinal fluid that mixes with the blood, unless

1 you see bright white - in which case, it has to be less than a
2 week old - you can't age it. This could have happened an hour
3 before. It could have happened weeks before."

4 Do you recall being asked those questions and giving
5 those answers?

6 A. I don't recall it, but I did review my testimony and
7 that's my testimony. The only thing different about that --

8 Q. Before we get to what's different, I want to ask you
9 what you said.

10 MS. EGAN: Judge, objection. Can we let the
11 witness answer the question?

12 MR. COFFEY: I haven't asked a question.

13 THE COURT: The objection is overruled.

14 Q. Your last testimony in this case was that this
15 subdural could have been weeks before; right?

16 A. No. That's not what I said. You misinterpreted what
17 I said.

18 Q. Well, you said --

19 A. I said there was hyperdense blood. It could have
20 been a week old. The difference between what I said then and
21 today is the number of days, couple of days difference.

22 Q. You don't think I have misread your testimony from
23 before; do you?

24 A. That's how I interpreted what I said.

25 Q. Well, I interpreted it as saying this could have been

1 three weeks before; it could have happened weeks before,
2 actually?

3 A. No. I said under certain circumstance. If it were
4 dark, it could have been three weeks before, is what I said.

5 Q. Now, the -- on the question of -- let me ask you
6 something about that. Assuming -- you said there was some
7 fresh blood. Now, I want to ask you about this. Assuming
8 there was fresh blood, in your opinion, there certainly was
9 blood that was not fresh; correct?

10 A. I don't know that.

11 Q. You don't know that?

12 A. No. It could be because it was a mixture of CSF. It
13 could have been all fresh blood mixed with CSF, or there could
14 have been a chronic component, too. I don't know. You can't
15 tell that.

16 Q. Okay. So, if you did, you would be guessing?

17 A. I would be guessing.

18 Q. Okay. Now, having said that, with regard to -- let
19 me talk about sepsis for the moment. With regard to the
20 process that occurs when bacteremia gets in the bloodstream,
21 starts to spread throughout the bloodstream and that process
22 that occurs, you are not qualified to testify to that. I'm not
23 saying you are not a good doctor. You understand that? But
24 that is not within your realm of expertise; is it?

25 A. It is not, no.

1 Q. So, if you were to take the issue of a bacteremia
2 getting in the system, going through the bloodstream,
3 developing sepsis and septic shock, whether septic shock then
4 caused the coagulopathy, you are not prepared in your expertise
5 to say that; correct? Do you understand my question?

6 A. I'm not a hundred percent. Are you asking me about
7 the coagulopathy, or are you just saying in general? I'm not
8 an expert in septic shock.

9 Q. Right. And whether septic shock can cause a
10 coagulopathy, which is excessive bleeding; correct?

11 A. I have testified that I know that it can.

12 Q. Right. We are on the same page there. But my point
13 is that whether septic shock can cause coagulopathy, you can't
14 agree or disagree with that; correct?

15 A. No. I agree that it can cause --

16 Q. Did this boy have coagulopathy?

17 A. Yes.

18 Q. Clinically or radiologically?

19 MS. EGAN: Objection, Judge. I think the Doctor
20 has already stated this isn't within his field of
21 expertise.

22 THE COURT: Overruled.

23 A. I think you said radiologically. You didn't mean
24 that. You meant laboratory.

25 Q. Yes.

1 A. The laboratory findings were consistent with a
2 coagulopathy. Clinically, I don't believe he had a
3 coagulopathy. He didn't have -- he wasn't bleeding from his IV
4 puncture sites. He didn't have bruises over his body that you
5 see typically with DIC.

6 Q. But he did have DIC as it turns out?

7 A. Well, he had -- yes. He had low coagulation factors
8 consistent with disseminated intravascular coagulopathy, which
9 we know can happen in severe head injuries, and it can happen
10 in other things, including septic shock.

11 Q. Okay. And when a coagulopathy happens, a person gets
12 that, he's going to be bleeding all throughout his body,
13 correct; his brain, his heart, everywhere. Right? Or if you
14 don't know, tell me.

15 A. I can tell you in my experience what I have seen. I
16 have seen, for example, in multiple trauma cases, people
17 develop DIC. They can have bleeding into the skin, into the
18 abdomen, into the chest, all places. I have not seen this kind
19 of intracranial bleeding related to -- ever related to DIC,
20 never seen.

21 Q. You are not an expert in that. But you agree you are
22 not an expert; correct?

23 A. I agree, but I have taken care of patients with head
24 injuries and septic shock, and I have never seen subdural
25 hematomas like this occur in septic shock personally. I don't

1 know if it's ever been reported, but I have not seen it.

2 Q. Well, do you think that a person who is an expert in
3 the field of pediatric infectious disease may know more than
4 you in this area?

5 A. I have no idea.

6 MS. EGAN: Objection.

7 THE COURT: Overruled.

8 Q. You have no idea?

9 A. Depending on their experience.

10 Q. Well, would you agree that a person may know more
11 than you in this area?

12 A. Yes, absolutely.

13 Q. Okay. So, you can find a radiologist, for example,
14 or a neurologist who says, "In my experience, I have never seen
15 something," and you as a neurosurgeon --

16 A. I have seen it.

17 Q. Yes. You would say, as a neurosurgeon, he may not
18 have, but I'm a neurosurgeon; correct?

19 A. Yes, absolutely.

20 Q. Now, if you know -- and if you don't, you can tell me
21 if it's a guess. If you had trauma - and you say he had
22 trauma, this boy had trauma - you have indicated there could be
23 a delayed effect; correct?

24 A. Delayed?

25 Q. In other words, he has -- I apologize. He has trauma

1 and, somehow, there's a bleed, and that bleed, what, just
2 begins to get worse?

3 A. Yes, even enlarges over time.

4 Q. And as that bleed is enlarging over time, how much
5 time is that going to take?

6 A. Well, that's not something I can say. It depends
7 on --

8 Q. So, the answer is you can't say?

9 A. Yes. The answer is you can't know for sure. That's
10 what I was talking about on the curve.

11 Q. I understand.

12 A. How close they are to the elbow, you don't
13 necessarily know.

14 Q. But if you have trauma which causes a bleed, at some
15 point in time, that bleed will start to cause significant
16 problems for a person; correct?

17 A. No.

18 Q. If it keeps bleeding?

19 A. Not necessarily.

20 Q. All right. So, when this baby started to bleed to a
21 point -- or when this subdural hematoma was caused, if it were
22 caused by trauma, you don't know; do you?

23 A. Again, I would say I don't know precisely when but --

24 Q. What is your range?

25 A. Probably a few days.

1 Q. A few days?

2 A. Yes.

3 Q. All right. Now, Doctor, let's take those few days.
4 In order for this to occur with a serious application of force,
5 using your words -- these are your words; aren't they?

6 A. Uh-huh.

7 Q. A couple of days means a couple of days from Sunday,
8 because Sunday is when this baby crashes and gets brought to
9 Samaritan, gets transferred to Albany Med. So, that couple of
10 days, your opinion is on Friday is when that trauma occurs;
11 right?

12 A. Friday or Saturday, I guess.

13 Q. Friday or Saturday?

14 A. It could extend it a little bit probably; but yeah,
15 within that range.

16 Q. Friday or Saturday; correct?

17 A. Okay.

18 Q. And you agree with me that on that Friday or
19 Saturday, because we have already agreed -- you have already
20 told us this. That if you have this serious application of
21 force, this child is going to display outward signs of having
22 suffered a serious head trauma; correct?

23 A. Those were your words. I didn't say that.

24 Q. Well, I thought you told me that if you had a serious
25 application of force to a person's head such as this, that that

1 person, this child, would display some physical manifestations
2 of that force. Didn't you tell me that?

3 A. I didn't, but I will tell you that now if you are
4 asking me.

5 Q. Do you agree with me?

6 A. Yes, but the symptoms may be transient. They may
7 resolve. In other words, the concussive part of it may
8 resolve.

9 Q. Well, how long would it take to resolve?

10 A. It may take minutes to hours.

11 Q. Okay.

12 A. So, if I smack a kid because he's crying and doesn't
13 want to go to bed, and then after I smack him, he stops crying;
14 he goes to bed and wakes up, you know, eight or nine hours
15 later, he may not have physical signs of having that.

16 Q. But using your testimony, Doctor -- and I'm asking
17 you now in your opinion, not what -- you might want -- I will
18 withdraw that. You would expect - in fact, you can state with
19 almost absolute certainty - that if you had this child
20 severely -- with a severe head blow, this child, within
21 minutes, if not continuing for hours, is going to display a
22 physical manifestation of that blow; isn't he?

23 A. Not necessarily physical in the sense of a bruising,
24 but I would expect the child would cry and be irritable at a
25 minimum.

1 Q. Well, he would also cry and be irritable and, also,
2 his eyes would begin, possibly, to glaze over and he would show
3 some shaking; wouldn't he?

4 A. No.

5 Q. He wouldn't?

6 A. Shaking means a seizure and many children who have
7 severe injuries don't have seizures.

8 Q. Let's talk about in terms of your accuracy here,
9 Doctor. And you try to be accurate. You testified here at
10 length. You testified another time at length, and you read
11 your testimony; correct?

12 A. Yes.

13 Q. So, let's not fill in the blanks when I ask you this
14 question. You have never said, have you, that this boy had any
15 bruising on his scalp; have you?

16 A. I have never said that.

17 Q. And --

18 A. Well --

19 Q. Oh, I'm sorry. I guess you may have said it.

20 A. You mean on the outside of his scalp?

21 Q. I don't care where it is. I don't care where it is.
22 Doctor, let's use the word bruising.

23 A. No. I'm not disputing the bruising. He showed no
24 external signs of trauma. That is true. I have said that.

25 Q. And you have never testified, ever, that this baby

1 had a subgaleal hemorrhage; have you?

2 A. I don't know.

3 Q. You don't what?

4 A. I don't know whether I testified to that or not.

5 Q. Come on, Doctor. You don't know whether you have?

6 A. No. I don't remember.

7 Q. Really?

8 A. Because I know it now, but I'm not sure when --

9 Q. You know it now?

10 A. Yes.

11 Q. Well, let me look at your -- Doctor, you testified
12 you weren't going to testify on behalf, solely, of the People.
13 I'm going to look now at your notes. And you tell this jury
14 whether you say you saw a subgaleal hemorrhage in your notes,
15 Doctor?

16 A. No. I did not see it.

17 Q. And on your direct examination with Ms. Egan, did you
18 ever utter those words, subgaleal hemorrhage?

19 A. I will take your word for it that I never did.

20 Q. Don't take my word for it. You have been in the
21 courtroom.

22 A. I don't remember that specific statement. I
23 don't recall. There was no external --

24 Q. Doctor, you really don't remember as you sit here?

25 A. I don't remember. I would not dispute what you are

1 saying, but I don't actually remember.

2 Q. If you saw a subgaleal hemorrhage, you would have
3 noted it; wouldn't you?

4 A. If I saw it when I examined him, I would have noted
5 it.

6 Q. He didn't have a subgaleal hemorrhage; did he?

7 A. I think he did ultimately. On autopsy, he had a
8 subgaleal hemorrhage, but I did not know that at the time; and
9 when I testified, I don't know what I knew about the autopsy.
10 I don't recall.

11 MR. COFFEY: May I take a minute?

12 THE COURT: Yes.

13 MS. BOOK: When Mr. Coffey is finished, may we
14 approach off the record one moment?

15 THE COURT: Yes. Attorneys approach, please,
16 off the record.

17 (Discussion off the record.)

18 Q. Doctor, why is there a specialty of neuroradiology?

19 A. Well, two reasons. One is neuroradiology --
20 initially, when it was formed, it was formed because there were
21 specialized techniques, CT scan, initially, that required new
22 training to understand it and be able to interpret it. Plus, I
23 think probably more importantly, there were a lot of procedures
24 that were done, for example, angiography, and the techniques of
25 angiography changed significantly more or less coinciding with

1 the time of the CT scan also that led -- those kind of studies
2 previously had been done by neurosurgeons who really didn't
3 want to do them any more. They wanted to be in the operating
4 room taking out brain tumors and such. And, so, we sort of
5 passed that along to the radiologist, and they required special
6 training to learn how to do those.

7 Q. Special training?

8 A. Special training to do the angiography and other
9 procedures and also, eventually, interpreting the scans.

10 Q. Do you ever refer cases to neuropathologists?

11 A. Um, I mean, I guess, yes. You know, when we do --
12 when we are in surgery and we remove tissue, that tissue goes
13 to the Department of Pathology; and if it's appropriate, the
14 neuropathologist would review both that material and offer an
15 opinion about it. So, in that sense, yes.

16 Q. Doctor, I'm going to go back to your sworn testimony
17 and ask you if you recall being asked this question and giving
18 this answer: "Question:" --

19 MS. EGAN: Object. Reading the question and the
20 answer is improper.

21 THE COURT: That objection is overruled.

22 Q. "Question: In this report that was read and reviewed
23 by Eric Hoover, M.D., his impression indicates: 'Large
24 bilateral extraaxial fluid collections, probably subdural on
25 the right.' Correct?

1 "Answer: Yes.

2 "Question: And in fact, his impressions and findings
3 do not make any reference to the words hemorrhage, hematoma or
4 blood; correct, Doctor?

5 "Answer: Yes. Well, I would like to review that
6 again, if you don't mind.

7 "Question: Sure.

8 "Answer: Yes. He refers to the subdural as a fluid
9 collection.

10 "Question: And that collection could have been there
11 for weeks, Doctor?

12 "Answer: Possibly.

13 "Question: Possibly months, too; correct, Doctor?

14 "Possibly months, but I would not expect to see the
15 density in the right side after months."

16 MS. EGAN: Objection, Judge. I don't believe
17 this is proper impeachment.

18 THE COURT: Why?

19 MS. EGAN: To read multiple questions and
20 multiple answers in a row.

21 THE COURT: That's precisely how you do it.
22 That objection is overruled.

23 Q. So, I'm going to go back to this. These are your
24 words, Doctor. And if you want to look at that, you tell me.

25 A. Go ahead.

1 Q. "Answer: This was possibly months, but I would not
2 expect to see the density in the right side after months unless
3 there were fresh hemorrhage.

4 "Question: Certainly, Doctor, you cannot rule out
5 the possibility that blood fluid collection had been there for
6 months; correct?

7 "It's possible that some of it was there for months.

8 "Question: And in terms of the subdural hematoma
9 that you talked about here today, certainly, Doctor, you can't
10 tell this jury -- you can't tell how long this had been there;
11 correct?

12 "Answer: Sitting here today and looking at those
13 scans, I cannot age the subdural."

14 Do you want to take a look at this and see if that's
15 what you said before?

16 A. No. It's not inconsistent with what I have said
17 today, frankly.

18 Q. Well, I thought you told us today you could age it;
19 it was within a couple days?

20 A. No. I said the bright signal in that subdural was a
21 few days; let's say a week.

22 Q. So, you could age it?

23 A. That component. But could there have been a chronic
24 component there for months before the acute blood entered the
25 subdural space? Yes.

1 Q. That's your answer today?

2 A. That's pretty much what I said then, too.

3 Q. So, when you say "I cannot age the subdural," that's
4 what you meant?

5 A. In another question, I did age the subdural. You
6 told me I aged it a week.

7 Q. Well, I will tell you what. On one answer, you said
8 you can age it; in one answer, you say you can't age it.

9 A. It depends on the interpretation. The entire amount
10 of subdural fluid, some of it may have been old, but some of it
11 was definitely fresh blood.

12 MR. COFFEY: That's all I have, Judge.

13 THE COURT: Ms. Egan, any redirect?

14 MS. EGAN: Yes, Judge, if I may just have a
15 minute.

16 THE COURT: Sure. Take your time.

17 **REDIRECT EXAMINATION**

18 **BY MS. EGAN:**

19 Q. Doctor, Mr. Coffey just asked you several questions
20 about the age of the subdural hematomas in [REDACTED]'s head.

21 A. Right.

22 Q. Would you please explain your opinion on the age of
23 the subdurals?

24 A. Okay. Traditionally, if you look at the density of
25 blood on CT scans, it undergoes a change over time. This is

1 sort of vaguely defined as acute, subacute and chronic. Acute
2 blood on a CT scan appears brighter or whiter than the average
3 density of the brainy substance. We relate densities to the
4 brain, what the brain looks like. If the brain looks like
5 gray -- and acute blood is brighter. It looks whiter than that
6 gray brain. So, that's acute.

7 Subacute, the density of the blood is more or less --
8 looks the same gray as the brain, and then chronic is when it
9 looks dark. It's darker than brain. Okay? So, that's the
10 typical way we used to characterize that.

11 But what we know now is that in some cases,
12 particularly in children, acute blood can also mix with
13 cerebrospinal fluid, and that dilutes the density of it. So,
14 an acute subdural that occurred one hour before a scan can look
15 just like [REDACTED]'s scan. So, it makes it more difficult. The
16 traditional acute, subacute, chronic designation doesn't hold
17 up in every case. It's much more complicated than that. What
18 determines -- what is a better determinate of age sometimes, of
19 a subdural, is an MRI; not always. The signal changes you see
20 with blood over time in an MRI is very, very, very complicated
21 and there are lots of exceptions. So, even then, subdurals are
22 very difficult to age, but the best indicator is --

23 MR. COFFEY: I object. This is nonresponsive.

24 THE COURT: Overruled.

25 A. What the best indicator is is the pathology. And by

1 that, I mean that, when you do an autopsy and look at the
2 subdural fluid, you can visually look at it and you can look at
3 it through a microscope and you can age it and --

4 MR. COFFEY: Objection. He's testifying as a
5 pathologist now.

6 THE COURT: Now the answer is becoming
7 unresponsive. I will sustain the objection. Ms. Egan,
8 you can ask another question.

9 Q. Is it possible to age a subdural hematoma to the
10 hour?

11 A. No.

12 Q. Is it possible to age a subdural hematoma to the day?

13 A. Based on just the CT scan?

14 Q. Yes.

15 A. No.

16 Q. What other information could give a more accurate age
17 to a subdural hematoma?

18 A. The history of when a trauma occurred, like in a car
19 accident, and you see an acute subdural on a scan. That would
20 be it. There are other things that are not specific but give
21 some credence to, more or less, when, for example. In this
22 child, we saw that the sutures were widely separated, and that
23 translates into the circumference of a measurement around the
24 head that is way out of the normal range. There are well
25 established ranges of head size in children and there are

1 graphs; and when you bring your child to the pediatrician for
2 the regular visits, he typically will measure the head
3 circumference and he will plot it on a graph. When you see
4 subdural hematomas that are slowly developing, they may not
5 cause symptoms. The first sign of a subdural might be a child
6 whose head circumference which had been at the 25th percentile
7 now suddenly is at the 98th percentile. Something happened
8 that caused that very rapid change in the head size. And, so,
9 a pediatrician, if he saw that, even though the child may
10 appear completely normal or maybe no history of anything, that
11 pediatrician would or should order some tests, either an
12 ultrasound --

13 MR. COFFEY: I object to this, Your Honor. It's
14 totally nonresponsive.

15 THE COURT: Sustained.

16 A. Well --

17 THE COURT: There's no question.

18 THE WITNESS: Sorry.

19 Q. Did you have an opportunity to review any records
20 pertaining to [REDACTED]'s head growth?

21 A. Yes.

22 Q. Was there anything indicative of intracranial
23 abnormality in those records?

24 A. Yes and no. The initial -- I believe at
25 approximately two months of age, he had a head circumference

1 measurement done by the pediatrician that placed him, I
2 believe, just under the 25th percentile, something in that
3 range; in other words, within normal range. It wasn't big.
4 When he came into the hospital, Albany Medical Center, you
5 know, during the admission that he died, his head circumference
6 was way above the 98th percentile. So, some time between --
7 the inference is that some time between two months and when he
8 came into Albany Med this event happened and progressed from
9 that point.

10 Q. Can the age of a subdural hematoma be determined more
11 accurately upon autopsy?

12 A. I would say it's my understanding that, yes, it can.

13 Q. Doctor, would you defer to an infectious disease
14 doctor's opinion of whether or not a child sustained an
15 inflicted brain injury?

16 A. No.

17 Q. Was an MRI ever performed on [REDACTED]?

18 A. No.

19 Q. Do you know why that was?

20 A. Yes, two reasons.

21 MR. COFFEY: I object as irrelevant. It wasn't.

22 MS. EGAN: Judge, this was covered on
23 cross-examination.

24 THE COURT: The objection is overruled.

25 A. There were two reasons. One is he was basically

1 brain-dead. So, it served no purpose in terms of treating
2 [REDACTED]. And secondly, he was very unstable, meaning his blood
3 pressure was very unstable, and an MRI requires moving a
4 patient and all - he was on a ventilator - all the equipment
5 down to the MRI facility. MR, as you may or may not know, is
6 an extremely powerful magnet, so there couldn't be any metal.
7 It's very complicated; plus the test itself takes some time.
8 So, he wasn't in a condition to have an MRI, and there was no
9 useful purpose in it in terms of treating Michael -- or
10 [REDACTED], I'm sorry. So, it was not done.

11 Q. Thank you, Doctor. May I ask what exhibit is up
12 there at the witness stand with you?

13 A. This is my note. This is Exhibit 22.

14 MS. EGAN: Mr. Coffey, do you have the
15 radiologist report?

16 MR. COFFEY: Yes.

17 Q. Do you know what time the CAT scan was performed on
18 [REDACTED]?

19 A. I don't recall.

20 Q. Would the date that the radiologist printed give you
21 an idea?

22 A. It would be on the, actually, on the scan, would be
23 the most accurate time.

24 MS. EGAN: If I could have a moment, Judge. I'm
25 just going to turn the scan back on. Judge, may I ask the

1 witness to step off the witness stand?

2 THE COURT: Sure.

3 Q. Dr. Waldman, could you take a look at that image from
4 the CAT scan CD in evidence? And can you tell me if you can
5 determine the date when the CAT scan was performed?

6 A. 1220:48.

7 Q. What date?

8 A. 9/21. So, 20 to one in the afternoon.

9 Q. Thank you, Doctor. Dr. Hoover's report refers to
10 large bilateral extraaxial fluid collections, probably
11 subdural. Is this language commonly used to refer to hematomas
12 among neurosurgeons and neuroradiologists?

13 A. I would say more neuroradiologists than
14 neurosurgeons.

15 Q. Have you heard of --

16 A. I mean, I use --

17 MR. COFFEY: I object. He keeps doing this. He
18 wasn't asked a question.

19 THE WITNESS: I'm continuing the --

20 MR. COFFEY: Excuse me, Doctor.

21 THE COURT: I understand the objection. Doctor,
22 had you finished your answer?

23 THE WITNESS: I had not.

24 THE COURT: You may continue.

25 A. I use fluid collections in other circumstances. I

1 didn't use them in this circumstance, because I believe these
2 to be subdural hematomas.

3 Q. Have you heard neuroradiologists use these type of
4 terms referring to hematomas or bloody fluid collections?

5 MR. COFFEY: Object as leading.

6 THE COURT: Sustained.

7 Q. Now, did you interpret [REDACTED]'s CAT scan yourself?

8 A. Yes.

9 Q. And what is your opinion as to the fluid collections?

10 MR. COFFEY: Judge, he testified to this at
11 length on direct examination. This is just a
12 recapitulation of his direct.

13 THE COURT: Haven't we covered this?

14 MS. EGAN: Judge, I just wanted to clarify it.
15 It was covered on cross at length.

16 MR. COFFEY: I had to ask questions from the
17 direct.

18 THE COURT: The purpose of redirect is to
19 clarify any areas you believe require clarification. It's
20 not just to go through direct all over again and get the
21 opinions all over again. I'm going to sustain the
22 objection.

23 MS. EGAN: Certainly, Judge.

24 Q. Now, you were asked questions about serious
25 application of force. Does force have a greater effect on an

1 infant's brain than on an adult's brain?

2 A. Well, there are definitely differences between the
3 anatomy and the physiology of an infant's brain and an older
4 person's brain or an adult brain. And, so, the response to
5 trauma also can differ. So, the answer is -- I think the
6 answer is yes. There are differences.

7 Q. Can an infant sustain a greater level of trauma from
8 the same application of force as an adult?

9 A. Well, it's known that infants are more susceptible to
10 diffuse -- an injury called diffuse axonal injury. There are
11 probably differences, but it's not an extremely well studied
12 area to give precise answers, but there are known differences
13 in the patterns of injuries sometimes, and an infant also has a
14 larger head relative to body mass and weaker neck muscles, so
15 that it makes acceleration-deceleration kinds of injuries more
16 important in young children compared to an older child or
17 adult. So, yes. There are differences. In terms of the
18 actual forces, I think that that is not exactly, no.

19 Q. Can an infant sustain serious brain injury without
20 external signs of injury?

21 A. Yes.

22 Q. Can an infant sustain a subdural hematoma without
23 external signs of injury?

24 A. Yes.

25 Q. Now, how would an altered state of consciousness

1 manifest itself in an infant? What signs would the infant
2 show?

3 A. The infant might be irritable, possibly inconsolable,
4 crying, could be sleepy and, you know, progressing to
5 unresponsive.

6 Q. And what's --

7 A. Could feed poorly, vomit.

8 Q. Would a layperson always be able to recognize these
9 symptoms as an altered state of consciousness?

10 MR. COFFEY: I object to this.

11 THE COURT: Sustained.

12 Q. Is it possible for those signs to resolve quickly?

13 A. Yes.

14 Q. Now, you were asked about bleeding and coagulopathy.
15 Was [REDACTED] bleeding everywhere?

16 A. No.

17 Q. Was [REDACTED] bleeding everywhere in his brain?

18 A. No.

19 Q. You were also asked about subgaleal hemorrhage. What
20 is a subgaleal hemorrhage?

21 A. The scalp has layers. The galea is a fibrous layer
22 on the inside of the scalp. And sometimes with injuries, you
23 know, blunt force trauma of some nature or another, you can get
24 tearing of some blood vessels that leads to a collection of
25 blood in the space between the galea and the skull. Sometimes

1 you can get bleeding on the outside of the galea and into the
2 scalp, as well.

3 Q. Are subgaleal -- how are subgaleal hemorrhages
4 typically detected?

5 A. Well, if they are large enough and you examine for
6 it, you can sometimes feel them. For example, after a normal
7 vaginal delivery, sometimes kids have a big -- (indicating);
8 sometimes that is subgaleal. Sometimes it is in another space,
9 subperiosteal; but you can sometimes see them and feel them.
10 They will feel sometimes boggy, is the term.

11 Q. I'm sorry. Are they visible in CAT scans?

12 A. They may be, yes. They may be.

13 Q. Are they always visible in CAT scans?

14 MR. COFFEY: Object as leading.

15 THE COURT: Overruled.

16 A. No. They are not always.

17 Q. Why would you not always be able to visualize a
18 subgaleal hemorrhage on a CAT scan?

19 A. It may not be big enough to see.

20 Q. Doctor, how many years were you reading your own
21 scans before neuroradiology became a specialty?

22 A. Well, I don't remember exactly when neuroradiology
23 became a specialty; but when I was a resident, there were - at
24 least at Albany Med - there were no neuroradiologists until I
25 was in my, I think, my third year following graduation from

1 medical school, is when Albany Med got their first MR. I could
2 be off by a year but, definitely, there was no neuroradiologist
3 when I was doing my first year of neurosurgery. And so,
4 technically, once I finished my residency, there has always
5 been a specialty, neuroradiology specialty.

6 Q. Do neuroradiologists receive training above and
7 beyond the training a neurosurgeon receives?

8 A. It's not above or beyond. It's different. You know,
9 they focus on imaging, reading images, doing the procedures
10 they do, angiography. There's some overlap. For example --

11 MR. COFFEY: I object to that. We are not
12 asking about overlap. He was asked about above and
13 beyond. It's different.

14 THE COURT: I think the witness has answered the
15 question.

16 MS. EGAN: If I could just have one minute,
17 Judge? I have nothing further.

18 THE COURT: Mr. Coffey, any recross?

19 MR. COFFEY: Thank you.

20 **RECROSS-EXAMINATION**

21 **BY MR. COFFEY:**

22 Q. Doctor, the trauma you are talking about, even if
23 there is trauma, can be accidental -- could be accidental;
24 couldn't it?

25 A. I can't tell from looking at scans or the patients

1 what the intent of an injury was. That is correct. I wasn't
2 there to witness it.

3 Q. Doctor, let me -- why don't you answer the question
4 specifically if you can? It can be accidental. Is that
5 correct, incorrect, or you are not prepared to answer it?
6 There's three choices. Which one would you choose?

7 A. I would choose it could be accidental.

8 MS. EGAN: Objection. The witness has already
9 answered the question, Judge.

10 THE COURT: Mr. Coffey, ask the question. The
11 witness can answer as he sees fit. If you feel it's
12 unresponsive, you can make an application, but the answer
13 will stand.

14 A. I can be responsive. The answer would be accidental.

15 Q. Now, did you tell us on your redirect examination
16 that a pathologist would be able to date the age of a subdural
17 hematoma better than you?

18 A. Better than from a CT scan, yes.

19 Q. And you indicated that a baby that suffered trauma,
20 you would expect him to have a diffuse axonal injury; correct?

21 A. No. I didn't say I expected they would have. I said
22 it's possible. I didn't even say that. I just threw it out
23 there as a different -- a difference between an adult brain and
24 a child's brain and the kinds of injuries that they can have.

25 Q. Rather than just throw things out, I assume you are

1 testifying as you are right, the purpose; correct?

2 A. I was trying to answer the question that was asked of
3 me.

4 Q. [REDACTED] did not have a diffuse axonal injury; did he?

5 A. I don't think we know the answer to that. First of
6 all, it's a pathological --

7 Q. The answer is you don't know?

8 MS. EGAN: Objection. Can he allow the witness
9 to answer the question?

10 MR. COFFEY: He answers and then he --

11 THE COURT: Just ask the question and allow the
12 witness to answer the question before you ask the next
13 question.

14 Q. Do you know if [REDACTED] had a diffuse axonal injury?

15 A. No, I don't.

16 MR. COFFEY: Okay. That's it.

17 THE COURT: Ms. Egan, any redirect?

18 MS. EGAN: No, Your Honor.

19 THE COURT: Doctor, you may step down. Thank
20 you. All right. Members of the jury, we are going to
21 break for the day at this point in time. I will ask that
22 you please report back here tomorrow at 9:30. We will
23 attempt to get started at 9:30 tomorrow.

24 During the course of this break, please do not
25 discuss the case among yourselves or with anyone else. Do